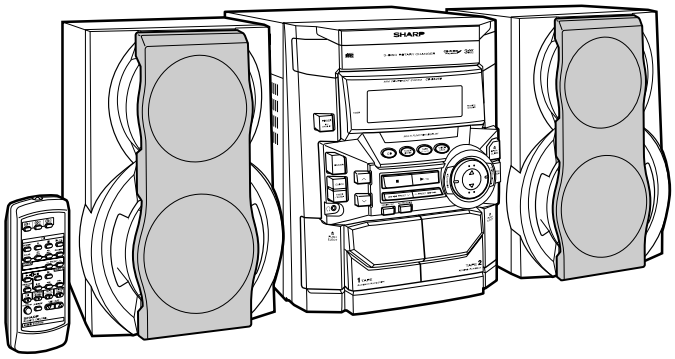
SHARP SERVICE MANUAL

No. S1105CDBA250/



MINI COMPONENT SYSTEM

MODEL CD-BA250

CD-BA250 Mini Component System consisting of CD-BA250 (main unit) and CP-BA250 (speaker system).

MINI COMPONENT SYSTEM

MODEL CD-BA2600

CD-BA2600 Mini Component System consisting of CD-BA2600 (main unit) and CP-BA2600 (speaker system).

COMPACT disc DIGITAL AUDIO

CD-R/RW Playable

3 DISC

- In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

FOR A COMPLETE DESCRIPTION OF THE OPERATION OF THIS UNIT, PLEASE REFER TO THE OPERATION MANUAL.

IMPORTANT SERVICE NOTES (FOR U.S.A. ONLY)

BEFORE RETURNING THE AUDIO PRODUCT

(Fire & Shock Hazard)

Before returning the audio product to the user, perform the following safety checks.

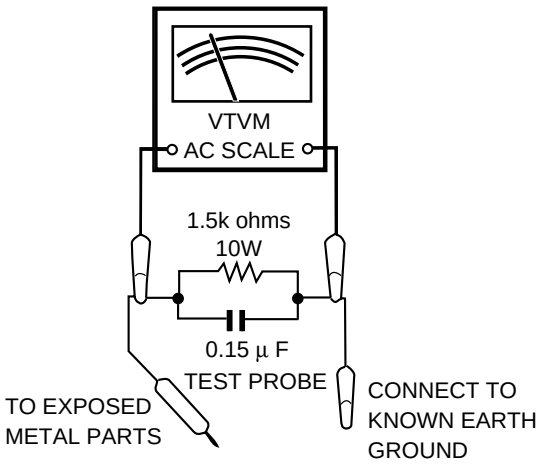
1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the audio product.
2. Inspect all protective devices such as insulating materials, cabinet, terminal board, adjustment and compartment covers or shields, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

* Plug the AC line cord directly into a 120 volt AC outlet.

* Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15μF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as conduit or electrical ground connected to earth ground.

* Use a VTVM or VOM with 1000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor (See diagram).

* Connect the resistor connection to all exposed metal parts having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.



All check must be repeated with the AC line cord plug connection reversed.

Any reading of 0.3 volt RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the audio product to the owner.

SPECIFICATIONS

CD-BA250/CD-BA2600

■ General

Power source	AC 120 V, 60 Hz
Power consumption	128 W
Dimensions	Width: 10-5/8" (270 mm) Height: 13" (330 mm) Depth: 13-7/16" (340 mm)
Weight	13.8 lbs. (6.3 kg)

■ Amplifier

Output power	75 watts minimum RMS per channel into 6 ohms from 60 Hz to 20 kHz, 10% total harmonic distortion
Output terminals	Speakers: 6 ohms Headphones: 16 - 50 ohms (recommended: 32 ohms)
Input terminals	Video/Auxiliary (audio signal): 500 mV/47 kohms

■ CD player

Type	3-disc multi-play compact disc player
Signal readout	Non-contact, 3-beam semiconductor laser pickup
D/A converter	1-bit D/A converter
Frequency response	20 - 20,000 Hz
Dynamic range	90 dB (1 kHz)

■ Tuner

Frequency range	FM: 87.5 - 108 MHz AM: 530 - 1,720 kHz

■ Cassette deck

Frequency response	50 - 14,000 Hz (Normal tape)
Signal/noise ratio	55 dB (TAPE 1, playback) 50 dB (TAPE 2, recording/playback)
Wow and flutter	0.3 % (WRMS)

CP-BA250/CP-BA2600

Type	2-way type speaker system 2" (5 cm) Tweeter 5-1/4" (13 cm) Woofer
Maximum input power	150 W
Rated input power	75 W
Impedance	6 ohms
Dimensions	Width: 8-11/16" (220 mm) Height: 13" (330 mm) Depth: 8-9/16" (217 mm)
Weight	6.6 lbs. (3.0 kg)/each

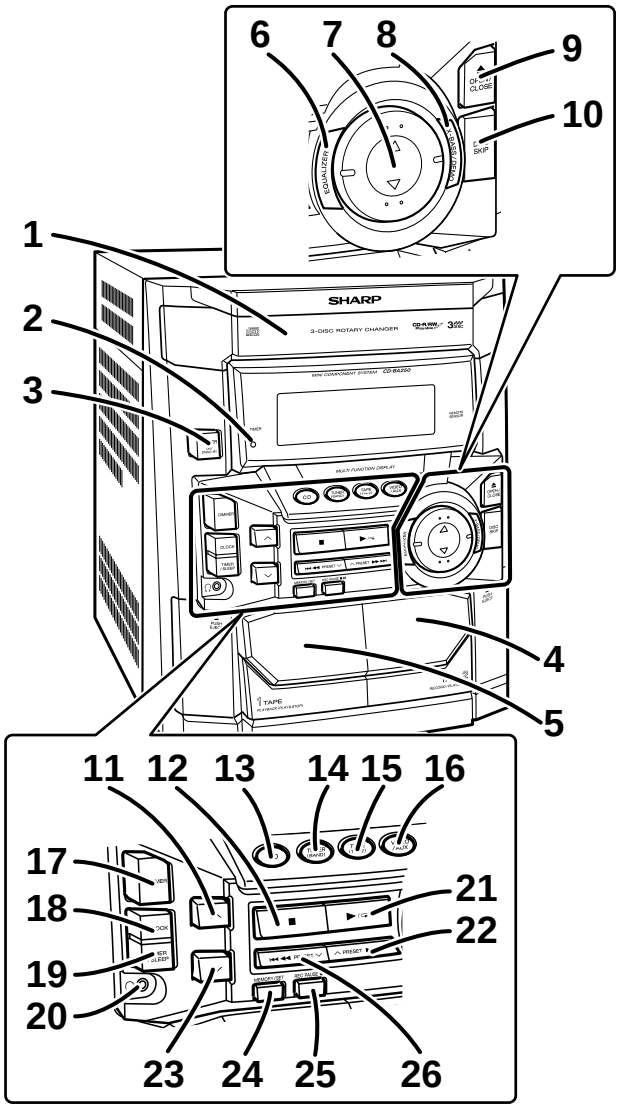
Specifications for this model are subject to change without prior notice.

NAMES OF PARTS

CD-BA250/CD-BA2600

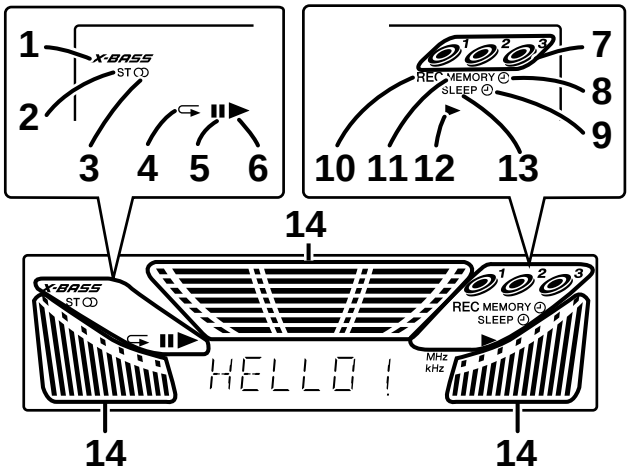
■ Front panel

1. Disc Tray
2. Timer Set Indicator
3. Power On/Stand-by Button
4. Tape 2 Cassette Compartment
5. Tape 1 Cassette Compartment
6. Equalizer Mode Select Button
7. Volume Up or Down Buttons
8. Extra Bass/Demo Mode Button
9. Disc Tray Open/Close Button
10. Disc Skip Button
11. Tuning and Time Up Button
12. CD or Tape Stop Button
13. CD Button
14. Tuner (Band) Button
15. Tape (1 ↔ 2) Button
16. Video/Auxiliary Button
17. Dimmer Button
18. Clock Button
19. Timer/Sleep Button
20. Headphone Jack
21. CD Play or Repeat, Tape Play Button
22. CD Track Up or Fast Forward, Tape 2 Fast Forward, Tuner Preset Up Button
23. Tuning and Time Down Button
24. Memory/Set Button
25. Tape 2 Record Pause Button
26. CD Track Down or Fast Reverse, Tape 2 Rewind, Tuner Preset Down Button



■ Display

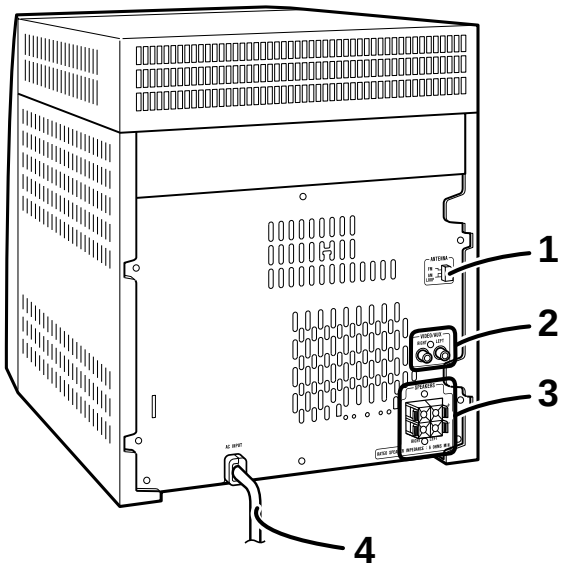
1. Extra Bass Indicator
2. FM Stereo Mode Indicator
3. FM Stereo Receiving Indicator
4. CD Repeat Play Indicator
5. CD Pause Indicator
6. CD Play Indicator
7. Disc Number Indicators
8. Timer Play Indicator
9. Timer Recording Indicator
10. Tape 2 Record Indicator
11. Memory Indicator
12. Tape Play Indicator
13. Sleep Indicator
14. Spectrum Analyzer/Volume Level Indicator



CD-BA250/CD-BA2600

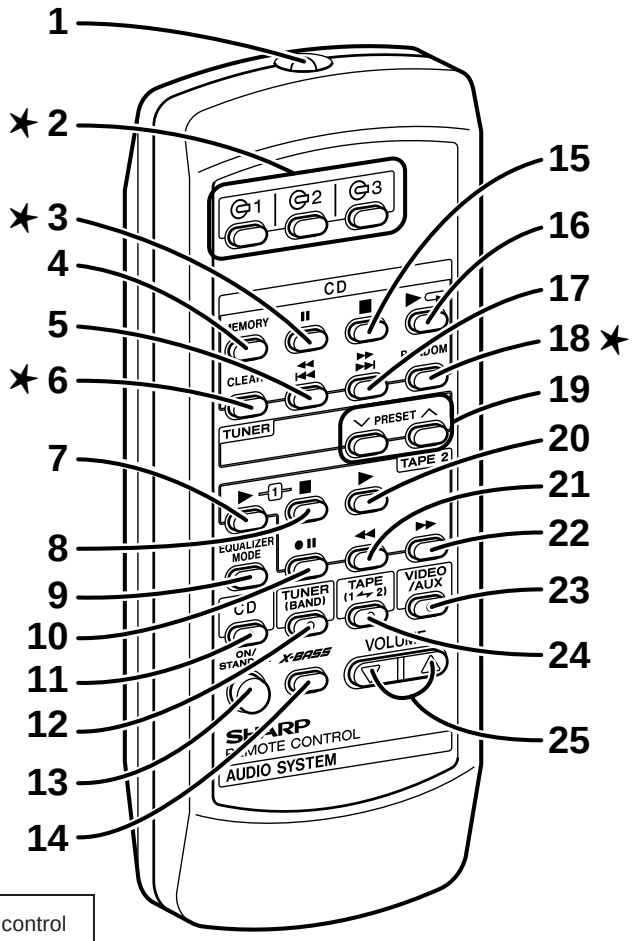
■ Rear panel

1. FM/AM Loop Antenna Jack
2. Video/Auxiliary (Audio Signal) Input Jacks
3. Speaker Terminals
4. AC Power Cord



■ Remote control

1. Remote Control Transmitter
2. Disc Number Select Buttons
3. CD Pause Button
4. CD Memory Button
5. CD Track Down or Fast Reverse Button
6. CD Clear Button
7. Tape 1 Play Button
8. Tape 1/Tape 2 Stop Button
9. Equalizer Mode Select Button
10. Tape 2 Record Pause Button
11. CD Button
12. Tuner (Band) Button
13. Power On/Stand-by Button
14. Extra Bass Button
15. CD Stop Button
16. CD Play or Repeat Button
17. CD Track Up or Fast Forward Button
18. CD Random Button
19. Tuner Preset Up/Down Buttons
20. Tape 2 Play Button
21. Tape 2 Rewind Button
22. Tape 2 Fast Forward Button
23. Video/Auxiliary Button
24. Tape (1↽ 2) Button
25. Volume Up or Down Buttons

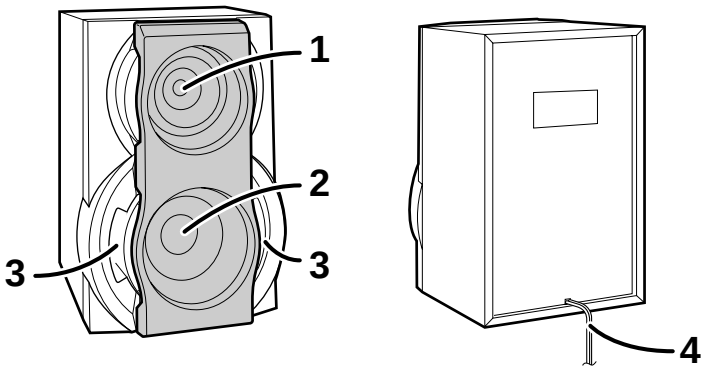


Buttons with "✱ " mark in the illustration can be operated on the remote control only.
Other buttons can be operated both on the main unit and the remote control.

CP-BA250/CP-BA2600

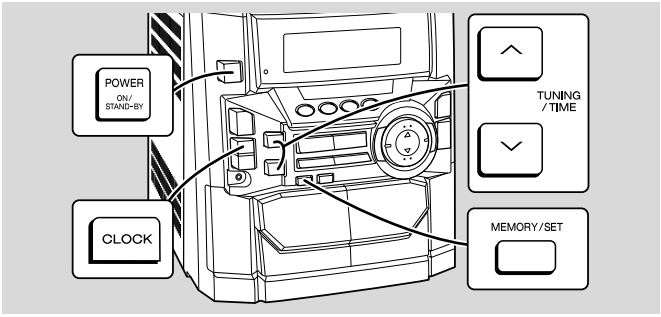
Speaker system

1. Tweeter
2. Woofer
3. Bass Reflex Duct
4. Speaker Wire



OPERATION MANUAL

Setting the Clock



In this example, the clock is set for the 12-hour (AM 12:00) display.

1 **Press the ON/STAND-BY button to turn the power on.**

2 **Press the CLOCK button and within 5 seconds, press the MEMORY/SET button.**

3 **Press the TUNING/TIME (∨ or ∧) button to select 12-hour or 24-hour display and then press the MEMORY/SET button.**

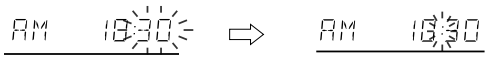
"AM 12:00" → The 12-hour display will appear.
(AM 12:00 - PM 11:59)
"AM 0:00" → The 12-hour display will appear.
(AM 0:00 - PM 11:59)
"0:00" → The 24-hour display will appear.
(0:00 - 23:59)

Note that this can only be set when the unit is first installed or it has been reset. (Refer to step 3 under "If trouble occurs".)

4 **Press the TUNING/TIME (∨ or ∧)button to adjust the hour and then press the MEMORY/SET button.**

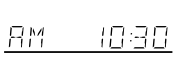
- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 hour. Holdit down to advance continuously.
- When the 12-hour display is selected, "AM" will change automatically to "PM".

5 **Press the TUNING/TIME (∨ or ∧) button to adjust the minutes and then press the MEMORY/SET button.**



- Press the TUNING/TIME (∨ or ∧) button once to advance the time by 1 minute. Hold it down to change the time in 5-minute intervals.
- The hour will not advance even if minutes advance from "59" to "00".
- The clock begins counting from "0" seconds. (Seconds are not displayed.) The time display will disappear after a few seconds.

To confirm the time display:
Press the CLOCK button.
The time display will appear for about 5 seconds.



Note:
The "CLOCK" or time will flash at the push of the CLOCK button when the AC power supply is restored after a power failure or unplugging the unit.
Readjust the clock as follows.

To readjust the clock:
Perform "Setting the Clock" from the beginning. If the time display is flashing, step 3 (for selecting the 12-hour or 24-hour display) will be skipped.

To change the 12-hour or 24-hour display:
1 Clear all the programmed contents. [Perform to step 3 under "If trouble occurs"]
2 Perform "Setting the Clock" from the beginning.

Troubleshooting Chart

Many potential "problems" can be resolved by the owner without calling a service technician.
If something is wrong with this product, check the following before calling your authorized SHARP dealer or service center.

■ General

Symptom	Possible cause
● The clock is not on time.	● Did a power failure occur? Reset the clock.
● When a button is pressed, the unit does not respond.	● Set this unit to the power stand-by mode and then turn it back on. ● If the unit still malfunctions, reset it. (Refer to step 3 under "If trouble occurs")
● No sound is heard.	● Is the volume level set to "0"? ● Are the headphones connected? ● Are the speaker wires disconnected?

■ CD player

Symptom	Possible cause
● Playback does not start. ● Playback stops in the middle or is not performed properly.	● Is the disc loaded upside-down? ● Does the disc satisfy the standards? ● Is the disc distorted or scratched?
● Playback sounds are skipped, or stopped in the middle of a track.	● Is the unit located near excessive vibrations? ● Is the disc very dirty? ● Has condensation formed inside the unit?

■ Tuner

Symptom	Possible cause
● Radio makes unusual noise consecutively.	● Is the unit placed near the TV or computer? ● Is the FM/AM loop antenna placed properly? Move the AC power cord away from the antenna if located near.

■ Cassette deck

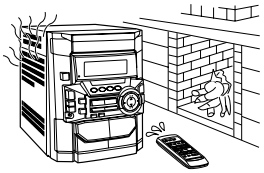
Symptom	Possible cause
● Cannot record.	● Is the erase-protection tab removed?
● Cannot record tracks with proper sound quality. ● Cannot erase completely.	● Is it a normal tape? (You cannot record on a metal or CrO_2 tape.)
● Sound skipping. ● Cannot hear treble. ● Sound fluctuation.	● Is there any slack? ● Is the tape stretched? ● Are the capstans, pinch rollers, or heads dirty?
● Cannot remove the tape.	● If a power failure occurs during playback, the heads remain engaged with the tape. Do not open the compartment forcibly. Wait until electricity resumes.

■ Remote control

Symptom	Possible cause
● The remote control does not operate.	● Is the AC power cord of the unit plugged in? ● Is the battery polarity respected? ● Are the batteries dead? ● Is the distance or angle incorrect? ● Does the remote control sensor receive strong light?

■ Condensation

Sudden temperature changes, storage or operation in an extremely humid environment may cause condensation inside the cabinet (CD pickup, tape heads, etc.) or on the transmitter on the remote control.
Condensation can cause the unit to malfunction. If this happens, leave the power on with no disc (or cassette) in the unit until normal playback is possible (about 1 hour). Wipe off any condensation on the transmitter with a soft cloth before operating the unit.



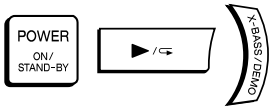
Troubleshooting Chart

■ If trouble occurs

When this product is subjected to strong external interference (mechanical shock, excessive static electricity, abnormal supply voltage due to lightning, etc.) or if it is operated incorrectly, it may malfunction.

If such a problem occurs, do the following:

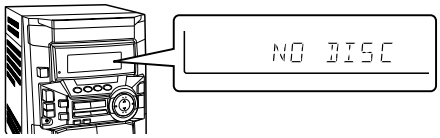
1 Set the unit to the stand-by mode and turn the power on again.
2 If the unit is not restored in step 1, unplug and plug in the unit, and then turn the power on.
3 If neither step 1 nor 2 restores the unit, do the following:
① Press the ON/STAND-BY button to enter the power stand-by mode.
② While pressing down the ► / ⮌ button and the X-BASS/DEMO button, press the ON/STAND-BY button until "CLEAR AL" appears.



Caution:
This operation will erase all data stored in memory including clock, timer settings, tuner preset, and CD program.

■ Before transporting the unit

1 Press the ON/STAND-BY button to turn the power on.
2 Press the CD button.
3 Press the ⏏ OPEN/CLOSE button to open the disc tray.
Remove all CDs inserted in the unit.
4 Press the ⏏ OPEN/CLOSE button to close the disc tray.
Make sure that "NO DISC" is displayed.
5 Press the ON/STAND-BY button to enter the stand-by mode, and then unplug the AC power cord from the AC outlet.

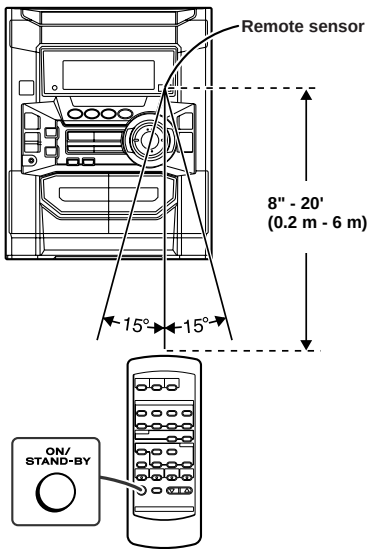


Remote Control

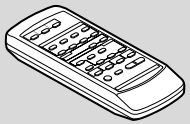
■ Test of the remote control

Face the remote control directly to the remote sensor on the unit.

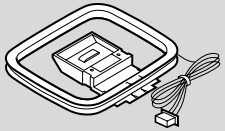
The remote control can be used within the range shown below:
Press the ON/STAND-BY button. Does the power turn on? Now, you can enjoy the music.



1 Accessories
Accesorios



Remote control × 1
Controlador remoto × 1



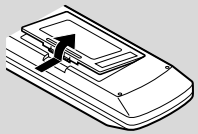
FM/AM loop antenna × 1
Antena de cuadro de FM/AM × 1

2 Battery Installation of the Remote Control
Instalación de las pilas del controlador remoto

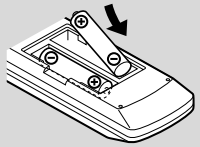
Use 2 "AA" size batteries (UM/SUM-3, R6, HP-7 or similar).
Use dos pilas del tamaño "AA" (UM/SUM-3, R6, HP-7 o equivalentes).

Batteries are not included.
Las pilas no están incluidas.

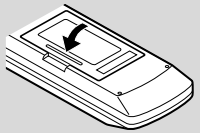
1 Remove the battery cover.
Extraiga la cubierta de las pilas.



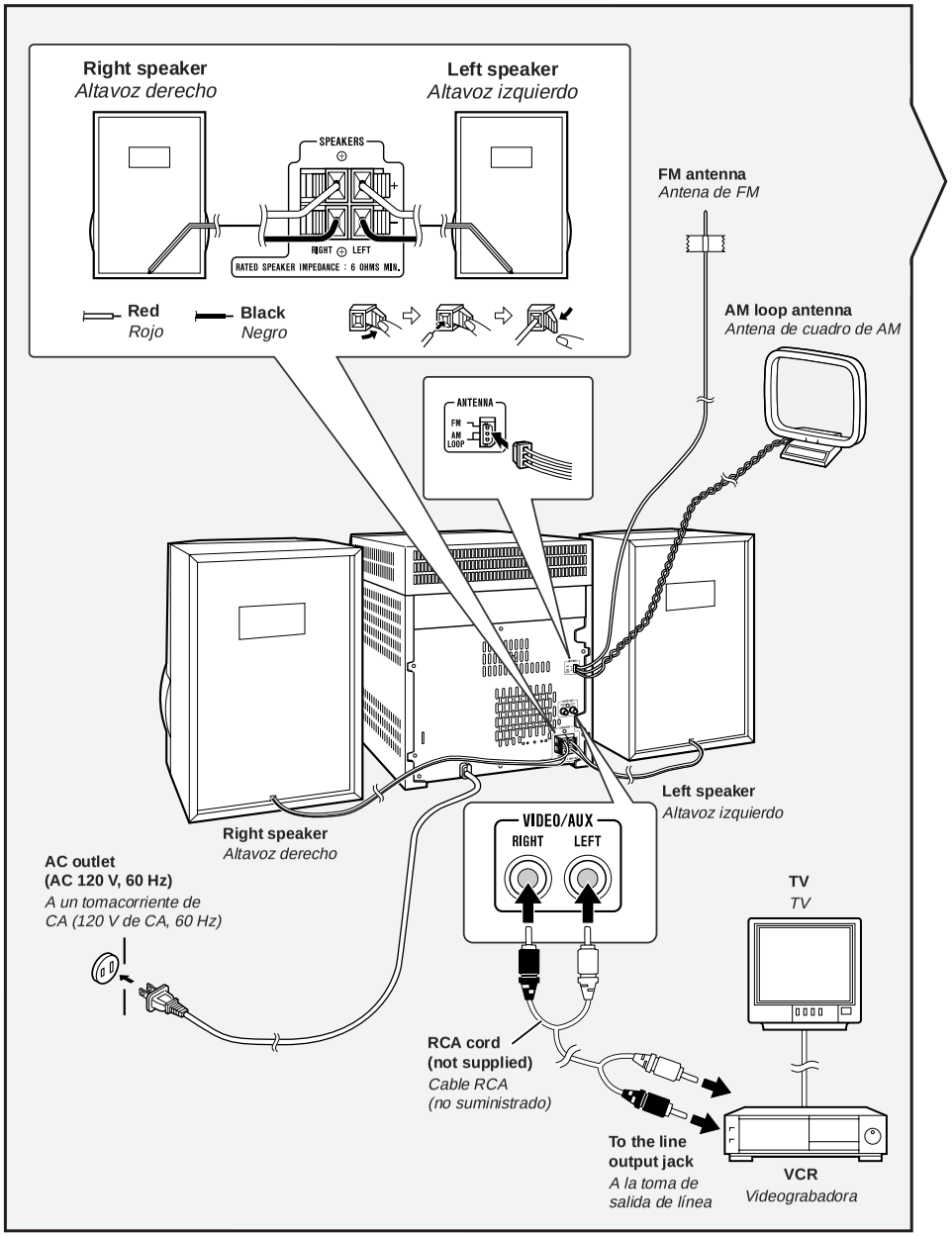
2 Insert the batteries as shown.
Inserte las pilas como se muestra.



3 Replace the cover.
Vuelva a colocar la cubierta.



3 System Connections
Conexiones del sistema



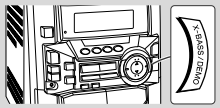
4 Turning on Your System
Conexión de la alimentación de su sistema

The first time the unit is plugged, the unit will enter the demonstration mode. You will see words scroll.

Cuando se enchufe por primera vez el aparato, se establecerá en el modo de demostración. Verá un desplazamiento de palabras.

1 **Press the X-BASS/DEMO button to cancel the demonstration mode.**

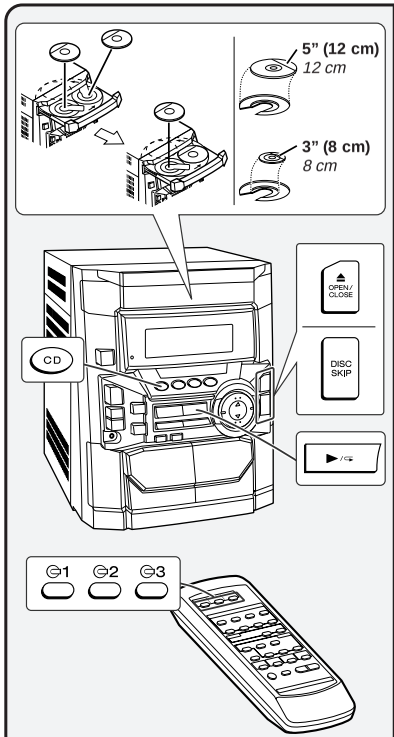
Pulse el botón X-BASS/DEMO para cancelar el modo de demostración.



2 **Press the ON/ STAND-BY button to turn the power on.**

Pulse el botón ON/ STAND-BY para conectar la alimentación.

Listening to a CD (CDs)
Audición de un disco CD (discos CD)



1 CD

Press the CD button.

Pulse el botón CD.

2 OPEN/ CLOSE

Press the ⏏ OPEN/CLOSE button to open the disc tray.

Pulse el botón ⏏ OPEN/CLOSE para abrir la bandeja de discos.

3 DISC SKIP

Place the CD(s) on the disc tray, label side up.
When loading a third disc, press the DISC SKIP button to turn the disc tray, then place the CD in the open position.

Coloque el disco compacto en la bandeja de discos, con el lado de la etiqueta hacia arriba.
Cuando ponga un tercer disco, pulse el botón DISC SKIP para girar la bandeja de discos, y coloque el disco compacto en la posición abierta.

4 OPEN/ CLOSE

Press the ⏏ OPEN/CLOSE button to close the disc tray.

Pulse el botón ⏏ OPEN/CLOSE para cerrar la bandeja de discos.

5 ⊖1 ⊖2 ⊖3

To select the CD you want to listen to first, press one of ⊖1 - ⊖3 buttons on the remote control.

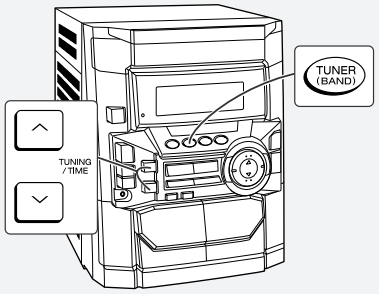
Para seleccionar el disco CD que desee escuchar primero, pulse uno de los botones ⊖1 - ⊖3 del controlador remoto.

6 ▶/⇆

Press the ▶/⇆ button to start playback.

Pulse el botón ▶/⇆ para iniciar la reproducción.

Listening to the Radio
Audición de la radio



FM stereo mode indicator
Indicador del modo de FM en estéreo

FM stereo receiving indicator
Indicador de recepción de FM en estéreo

1 TUNER (BAND)

Press the TUNER (BAND) button repeatedly to select the desired frequency band (FM or AM).

Pulse repetidamente el botón TUNER (BAND) para seleccionar la banda de frecuencia deseada (FM o AM).

2 TUNING / TIME

Press the TUNING/TIME (∨ or ∧) button to tune in to the desired station.
When the TUNING/TIME button is pressed for more than 0.5 seconds, scanning will start automatically and the tuner will stop at the first receivable broadcast station.

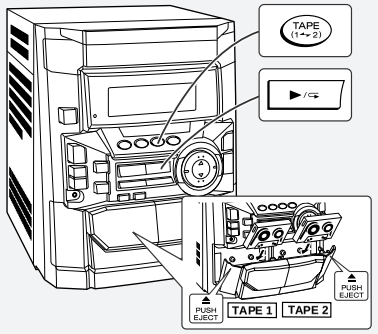
Pulse el botón TUNING/TIME (∨ o ∧) para sintonizar la emisora deseada.
Cuando se pulse el botón TUNING/TIME durante más de 0,5 segundos, la exploración se iniciará automáticamente y el sintonizador se parará en la primera emisora difusora que pueda recibirse.

TUNER (BAND)

To receive an FM stereo transmission:
Press the TUNER (BAND) button to display the "ST" indicator.
- **"ꝏ" will appear when an FM broadcast is in stereo.**

Para recibir una transmisión de FM en estéreo:
Pulse el botón TUNER (BAND) para que se encienda el indicador "ST".
- *"ꝏ" aparecerá cuando una difusión de FM sea en estéreo.*

Listening to a Cassette Tape (TAPE 1 or TAPE 2)
Audición de una cinta de cassette (TAPE 1 o TAPE 2)



1 **Open the cassette door by pushing the area marked "⏏PUSH EJECT".**

Abra la puerta del cassette pulsando la parte marcada "⏏ PUSH EJECT".

2 **Load a cassette into the TAPE 1 or TAPE 2 cassette compartment with the side to be played facing toward you.**

Cargue un cassette en el compartimiento de cassette de TAPE 1 o de TAPE 2 con la cara a reproducirse encarada hacia usted.

3 TAPE (1⇄2)

Press the TAPE (1⇄2) button to select the cassette you want to listen to.

Pulse el botón TAPE (1⇄2) para seleccionar el cassette que desee escuchar.

4 ▶/⇆

Press the ▶/⇆ button to start playback.

Pulse el botón ▶/⇆ para iniciar la reproducción.

DISASSEMBLY

Caution on Disassembly

Follow the below-mentioned notes when disassembling the unit and reassembling it, to keep it safe and ensure excellent performance:

1. Take cassette tape and compact disc out of the unit.
2. Be sure to remove the power supply plug from the wall outlet before starting to disassemble the unit.
3. Take off nylon bands or wire holders where they need to be removed when disassembling the unit. After servicing the unit, be sure to rearrange the leads where they were before disassembling.
4. Take sufficient care on static electricity of integrated circuits and other circuits when servicing.

CD-BA250/CD-BA2600

STEP	REMOVAL	PROCEDURE	FIGURE
1	Top Cabinet	1. Screw ..... (A1) x4	9-1
2	Side Panel (Left/Right)	1. Screw ..... (B1) x8	9-1
3	CD Player Unit/ CD Tray Cover	1. Turn on the power supply, open the disc tray, take out the CD tray cover, and close. (Note 1) 2. Screw ..... (C1) x1 3. Hook ..... (C2) x3 4. Hook ..... (C3) x2 5. Socket ..... (C4) x2	9-2
4	Rear Panel with Fan Motor	1. Screw ..... (D1) x9 2. Socket ..... (D2) x1	9-2
5	Main PWB	1. Screw ..... (E1) x3 2. Socket ..... (E2) x3 3. Flat Cable ..... (E3) x1 4. Flat Wire ..... (E4) x1	9-2 10-2
6	Front Panel	1. Screw ..... (F1) x2	10-2
7	Display PWB	1. Screw ..... (G1) x11 2. Flat Cable ..... (G2) x1	10-3
8	Tape Mechanism	1. Open the cassette holder. 2. Screw..... (H1) x5	10-3
9	Headphones PWB	1. Screw ..... (J1) x1	10-3
10	Turntable	1. Hook ..... (K1) x2 2. Cover ..... (K2) x1	10-4
11	Disc Tray	1. Turn fully the lock lever in the arrow direction. 2. While holding the lock lever,rotate the cam gear until the cam gear rib engages with the clamp lever. 3. Push the slide holder backward to engage the claw with the groove and remove it in the direction of the arrow. ..... (L1) x6	9-3 10-1 10-5
12	CD Servo PWB (Note 2)	1. Screw ..... (M1) x1 2. Hook ..... (M2) x2 3. Socket ..... (M3) x4	10-6
13	CD Mechanism	1. Hook ..... (N1) x2 2. Hook ..... (N2) x3	11-1
14	Loading Motor PWB	1. Hook ..... (P1) x5	11-1

Note 1: How to open the changer manually. (Fig. 9-3)

1. In this state, turn fully the lock lever in the arrow direction through the hole on the loading chassis bottom.
2. While holding the lock lever, rotate the cam gear anticlockwise until the cam gear rib engages with the clamp lever. (Fig. 10-1)
3. After that, push forward the CD slide holder.

Note 2:

1. After removing the connector for the optical pickup from the connector, wrap the conductive aluminium foil around the front end of the connector so as to protect the optical pickup from electro-static damage.

CD-BA250/CD-BA2600

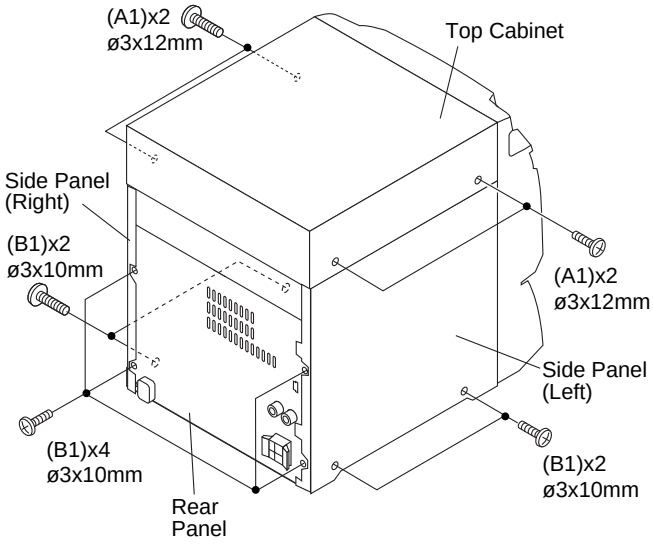


Figure 9-1

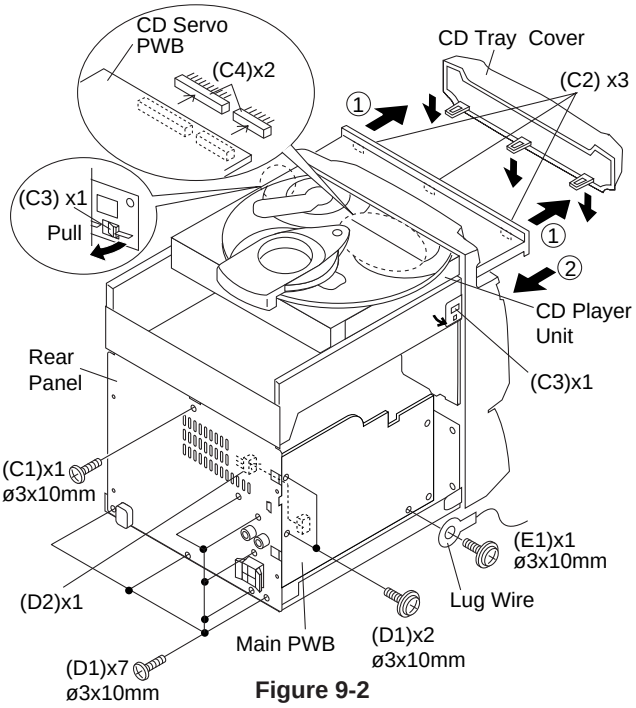


Figure 9-2

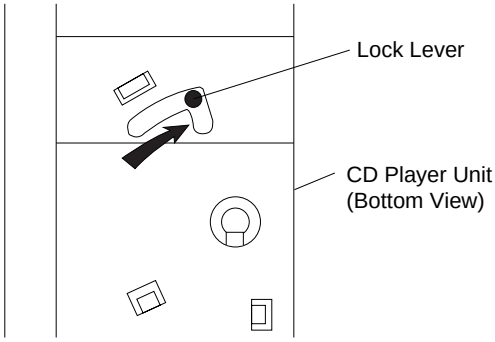


Figure9-3

Note 3:

1. Be careful not to break the claw of the CD mechanism.
2. When fining back the cam gear assembly, let it lock by front movement.

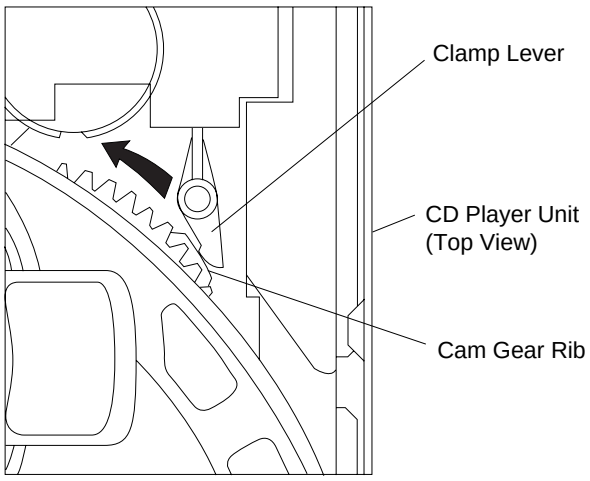


Figure 10-1

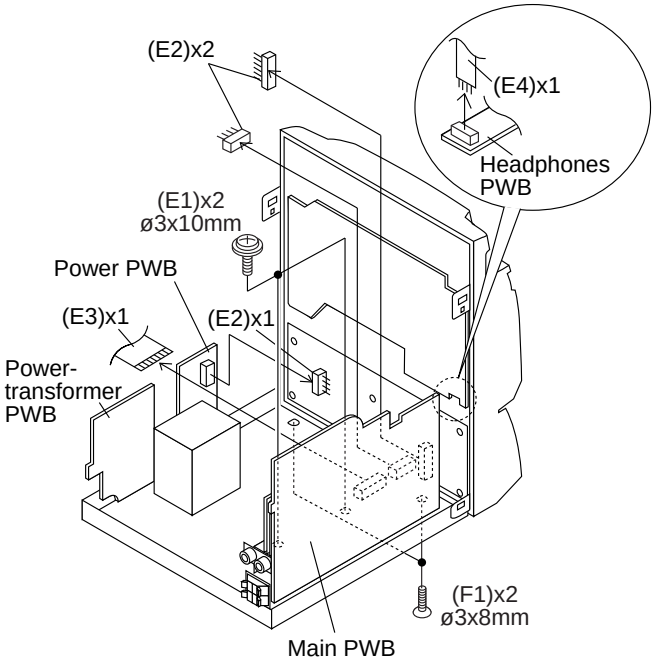


Figure 10-2

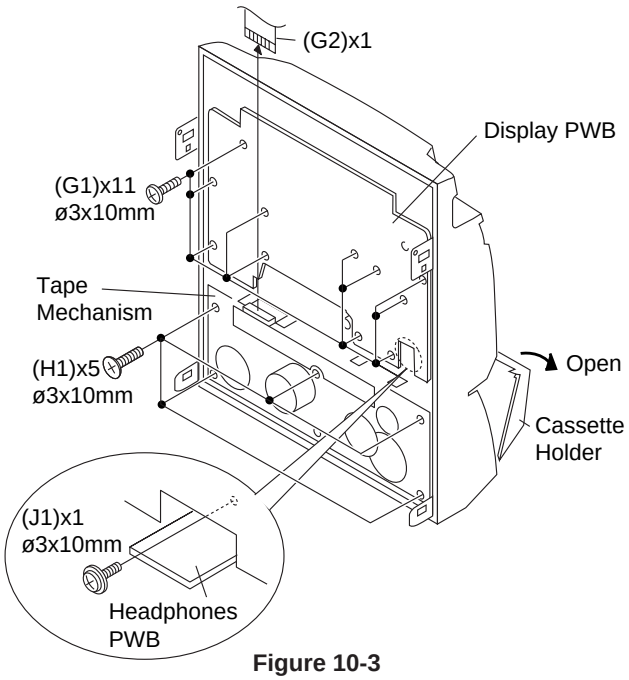


Figure 10-3

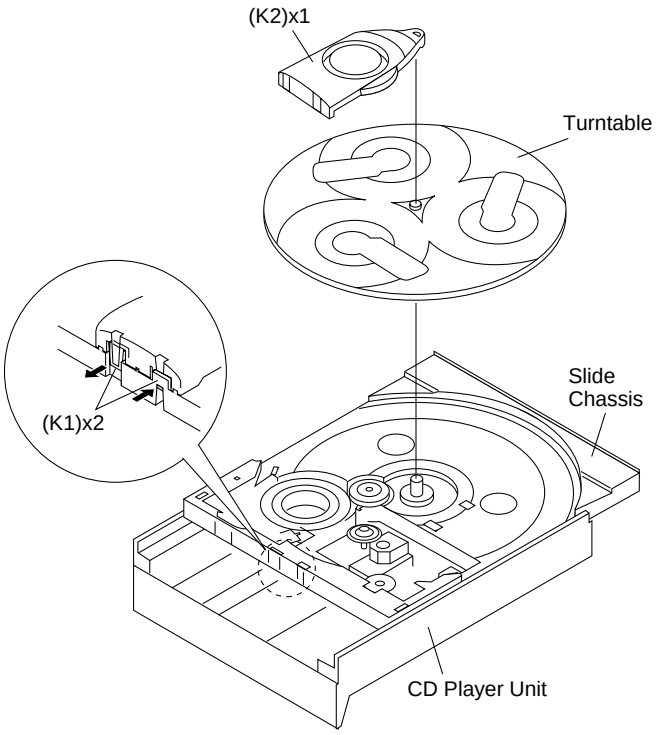


Figure 10-4

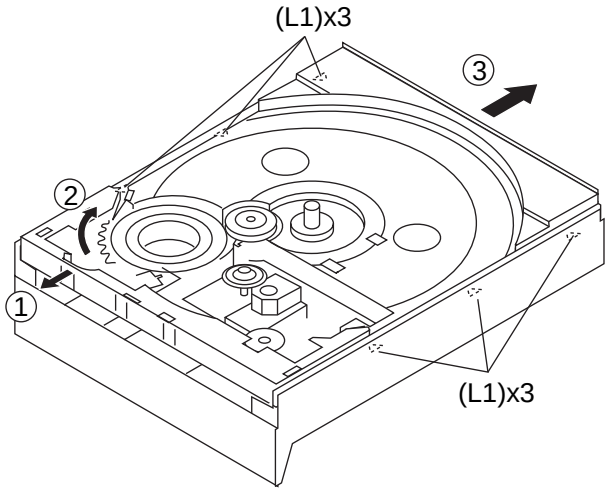


Figure 10-5

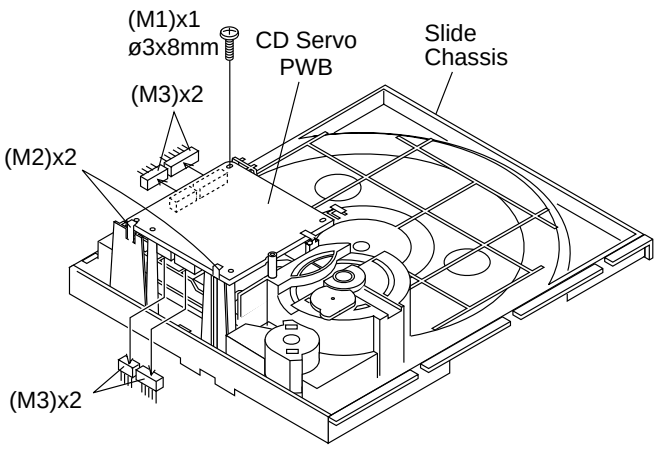


Figure 10-6

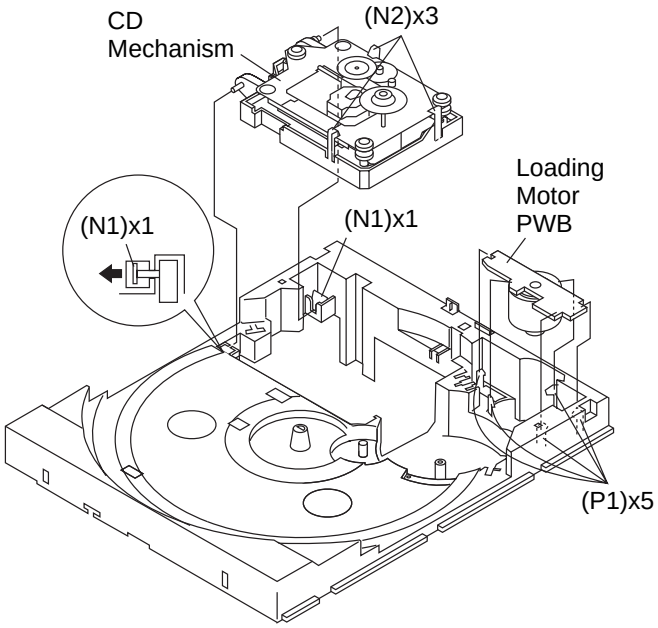


Figure 11-1

CP-BA250/CP-BA2600			
STEP	**REMOVAL**	**PROCEDURE**	**FIGURE**
1	Front Panel	1. Net..... (A1) x1	11-2
2	Woofer	1. Screw ..... (B1) x4	11-3
3	Tweeter	1. Screw ..... (C1) x2	11-3

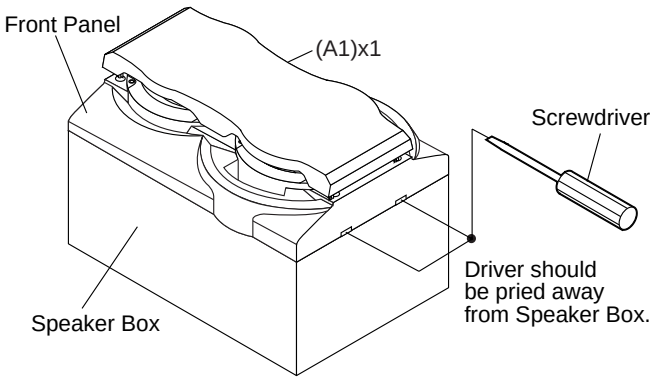


Figure 11-2

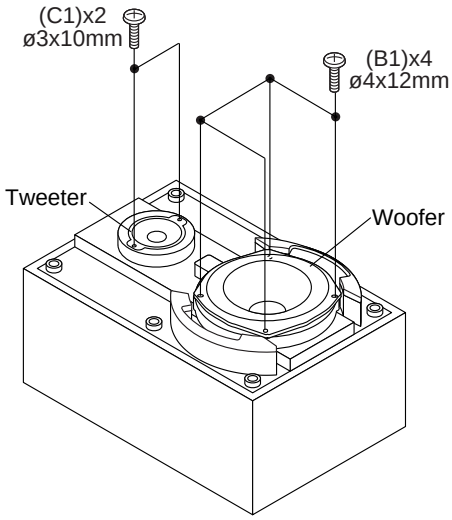


Figure 11-3

REMOVING AND REINSTALLING THE MAIN PARTS

TAPE MECHANISM SECTION

Perform steps 1 to 6 and 8 of the disassembly method to remove the tape mechanism.

How to remove the record/playback and erase heads (TAPE 2) (See Fig. 12-1)

1. When you remove the screws (A1) x 2 pcs., the recording/playback head and three-dimensional head of the erasing head can be removed.

How to remove the playback head (TAPE 1) (See Fig. 12-2)

1. When you remove the screws (B1) x 2 pcs., the playback head.

How to remove the pinch roller (TAPE 1/2) (See Fig. 12-3)

1. Carefully bend the pinch roller pawl in the direction of the arrow **<A>**, and remove the pinch roller (C1) x 1 pc., in the direction of the arrow **<B>**.

Note:
When installing the pinch roller, pay attention to the spring mounting position.

How to remove the belt (TAPE 2) (See Fig. 12-4)

1. Remove the main belt (D1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (D2) x 1 pc.

How to remove the belt (TAPE 1) (See Fig. 12-4)

1. Remove the main belt (E1) x 1 pc., from the motor side.
2. Remove the FF/REW belt (E2) x 1 pc.

How to remove the motor (See Fig. 12-5)

1. Remove the screws (F1) x 2 pcs., to remove the motor.

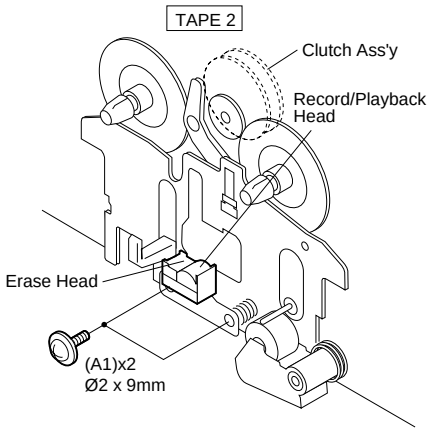


Figure 12-1

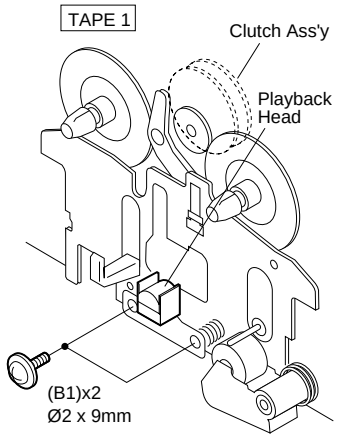


Figure 12-2

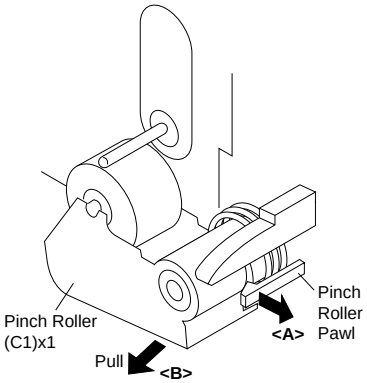


Figure 12-3

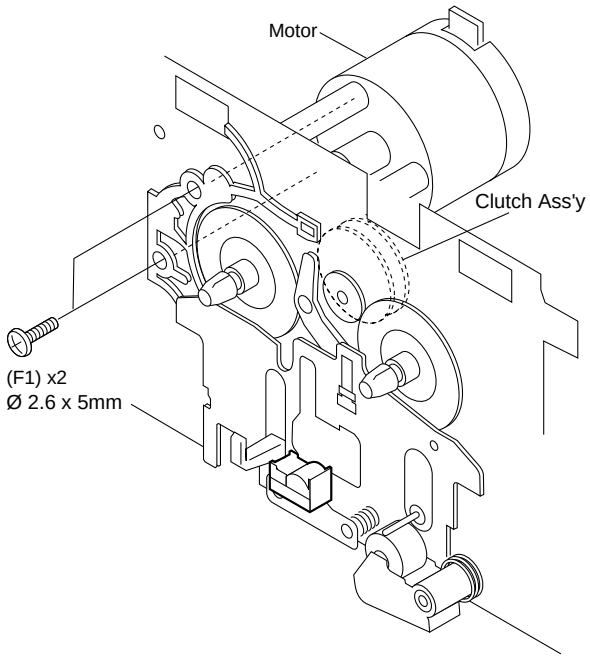


Figure 12-5

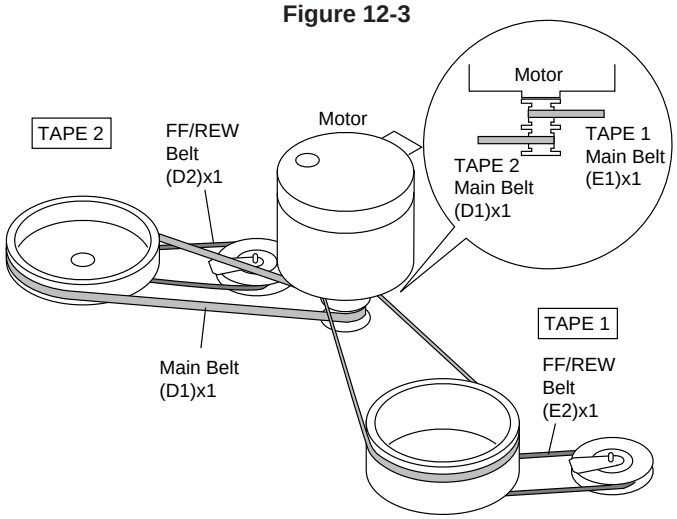


Figure 12-4

CD MECHANISM SECTION

Perform steps 1, 2, 3, 10,11,12 and 13 of the disassembly method to remove the CD mechanism.

How to remove the loading motor (See Fig. 13-1)

1. Bend the hooks (A1) x 5 pcs., to remove the loading motor.
2. Remove the drive belt (A2) x 1pc.

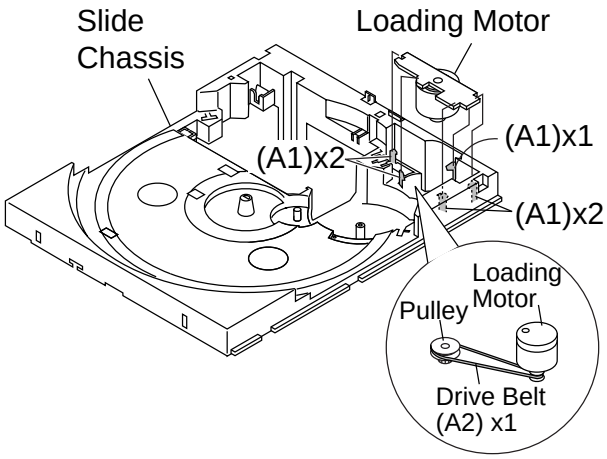


Figure 13-1

How to remove the pickup (See Fig. 13-2)

1. Remove the stop washer (B1) x 1 pc., to remove the gear (B2).
2. Remove the screws (B3) x 2 pcs., to remove the shaft (B4).
3. Remove the pickup.

Note

After removing the connector for the optical pickup from the connector wrap the conductive aluminium foil around the front end of connector so as to protect the optical pickup from electrostatic damage.

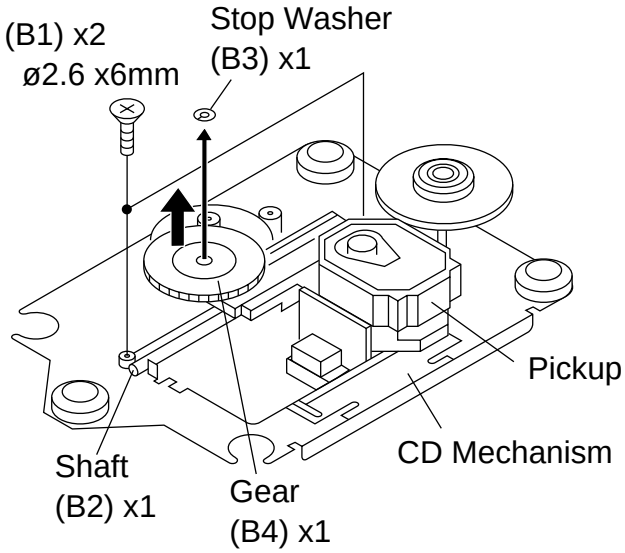


Figure 13-2

ADJUSTMENT

MECHANISM SECTION

• Driving Force Check

Torque Meter	Specified Value
Play: TW-2111	Tape 1: Over 80 g Tape 2: Over 80 g

• Torque Check

Torque Meter	Specified Value	
	Tape 1	Tape 2
Play: TW-2111	30 to 80 g.cm	30 to 80 g.cm
Fast forward: TW-2231	—	70 to 180 g.cm
Rewind: TW-2231	—	70 to 180 g.cm

• Tape Speed

	Test Tape	Adjusting Point	Specified Value	Instrument Connection
Normal speed	MTT-111	Variable Resistor in motor.	3,000 ± 30 Hz	Speaker terminal (Load resistance: 6 ohms)

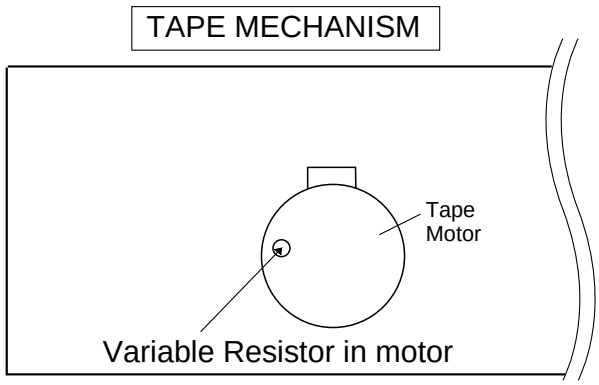


Figure 13-3

TUNER SECTION

fL: Low-range frequency
fH: High-range frequency

- **AM IF/RF**

Signal generator: 400 Hz, 30%, AM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Parts	Instrument Connection
AM IF	450 kHz	1,720 kHz	T351	*1
AM Band Coverage	—	530 kHz	(fL): T306 1.1 ± 0.1 V	*2
AM Tracking	990 kHz	990 kHz	(fL): T303	*1

*1. Input: Antenna Output: TP302
*2. Input: Antenna Output: TP301

- **FM RF**

Signal generator: 1 kHz, 75 kHz dev., FM modulated

Test Stage	Frequency	Frequency Display	Setting/ Adjusting Point	Instrument Connection
FM Band Coverage	—	87.50 MHz	T301(fL): 1.3 V ± 50 mV	*1
FM RF	98.00 MHz (10-30 dB)	98.00 MHz	L312	*2

*1. Input: Antenna Output: TP301
*2. Input: Antenna Output: Speaker terminal

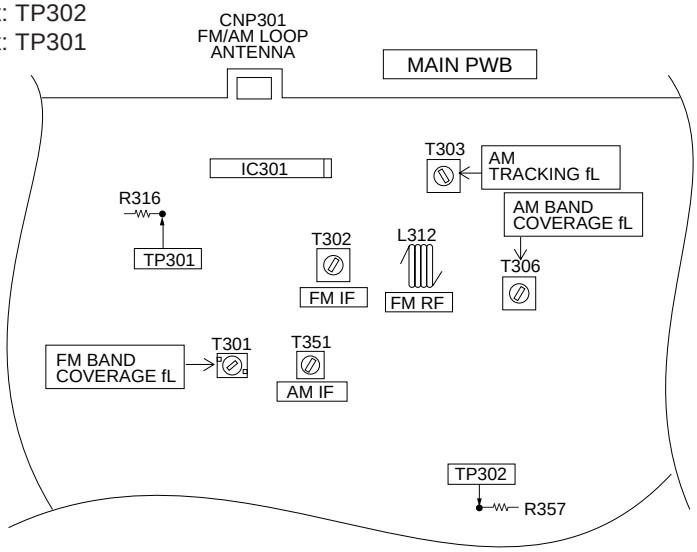


Figure 14-1 ADJUSTMENT POINTS

CD SECTION

- **Adjustment**

Since this CD system incorporates the following automatic adjustment functions, readjustment is not needed when replacing the pickup. Therefore, different PWBs and pickups can be combined freely.

Each time a disc is changed, these adjustments are performed automatically. Therefore, playback of each disc can be performed under optimum conditions.

Items adjusted automatically

(1) Offset adjustment (The offset voltage between the head amplifier output and the VREF reference voltage is compensated inside the IC.)
  * Focus offset adjustment
  * Tracking offset adjustment

(2) Tracking balance adjustment (waveform drawing Fig.14-2 EFBL)

(3) Gain adjustment (The gain is compensated inside the IC so that the loop gain at the gain crossover frequency will be 0 dB.)
  * Focus gain adjustment
  * Tracking gain adjustment

CD ERROR CODE DESCRIPTION

Error	State Code
	[Servo System Error]
0001	Cannot detect Pickup-in SW
0002	DSP access error
	[Error during close operation]
0101	Open/Close SW not functioning (Low → High)
0103	Open/Close SW not functioning (High → Low)
	[Error during open operation]
0201	Open/Close SW not functioning (Low → High)
0203	Open/Close SW not functioning (High → Low)
	[Error during skip operation]
0302	Pickup-in SW is not detected
0306	During Disc 1 search, Open/Close SW or Clamp SW or Disc SW do not change to low.
0307	Clamp SW not function (Low → High)
0308	Clamp SW not function (High → Low)

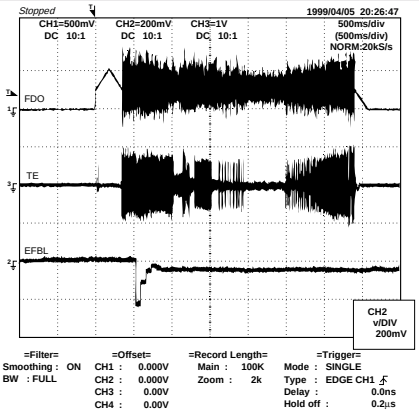

Stopped
1999/04/05 20:26:47
CH1=500mV DC 10:1
CH2=200mV DC 10:1
CH3=1V DC 10:1
500ms/div (500ms/div) NORM:20kS/s
FDO
TE
EFBL
CH2 v/DIV 200mV
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000V CH2 : 0.000V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2k
=Trigger= Mode : SINGLE Type : EDGE CH1 Delay : 0.0ns Hold off : 0.2µs

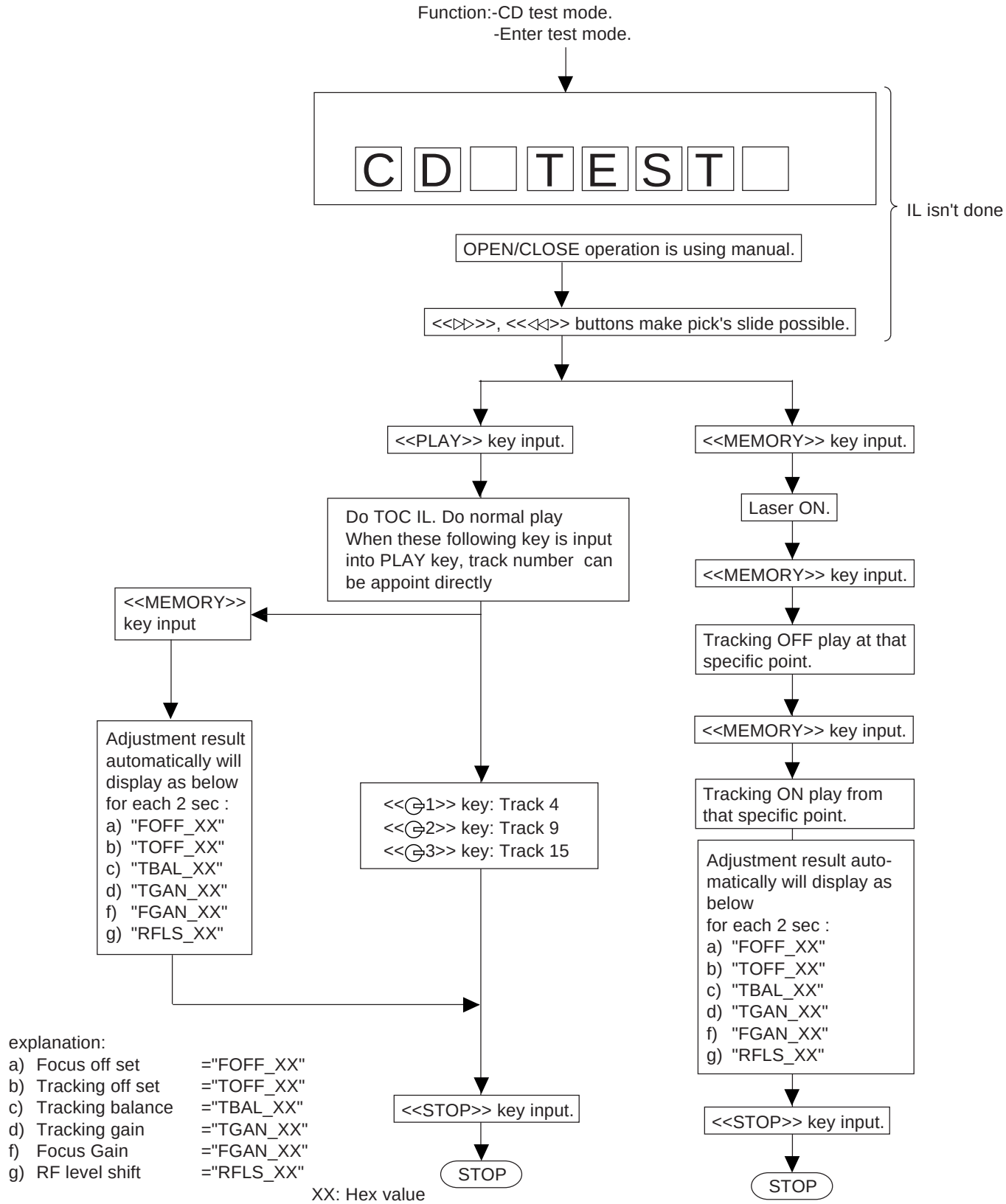
Figure 14-2

TEST MODE

·Setting the test mode

Any one of test mode can be set by pressing several keys as follows.

<X-BASS> + <CD> + <POWER> TEST:CD operation test



explanation:

a)	Focus off set	="FOFF_XX"
b)	Tracking off set	="TOFF_XX"
c)	Tracking balance	="TBAL_XX"
d)	Tracking gain	="TGAN_XX"
f)	Focus Gain	="FGAN_XX"
g)	RF level shift	="RFLS_XX"

XX: Hex value

VOL — Last memory
BAL — CENTER
P.GEQ — FLAT
X-BASS — OFF

To cancel : Power OFF

Sliding the PICKUP with <<▷▷>>, <<◁◁>> button must only be in STOP mode.

Standard Specification of Stereo System Error Message Display Contents

Error Contents		DISPLAY	Notes
Output while Device Protection Operation		'PROTECT'	00: While in Protect Circuit Operate 01: Over Current Detection 02: DC Detection 03:
TAPE	Mechanism Error	'ER-TA**'	00: Tape Mechanism Error 01: Initial Error 02: 03:
CD/VCD	Pickup Mechanism Error	'ER-CD**'	00: Pickup Mechanism Error 01: PU-IN SW Detection NG 02: 03: 04:
	CD Changer Mechanism Error	'ER-CD**'	10: Changer Error 11: Initial Error 12: 13:
	Tray Error	'ET-CD**'	20: Tray Error 21: 22: 23:
	Focus Not Match	'NO DISC'	
	IL Time Over	'NOT READ'	
TUN	PLL Unlock	'ER-TU**'	00: TUN Error 01: PLL Unlock 02: 03:

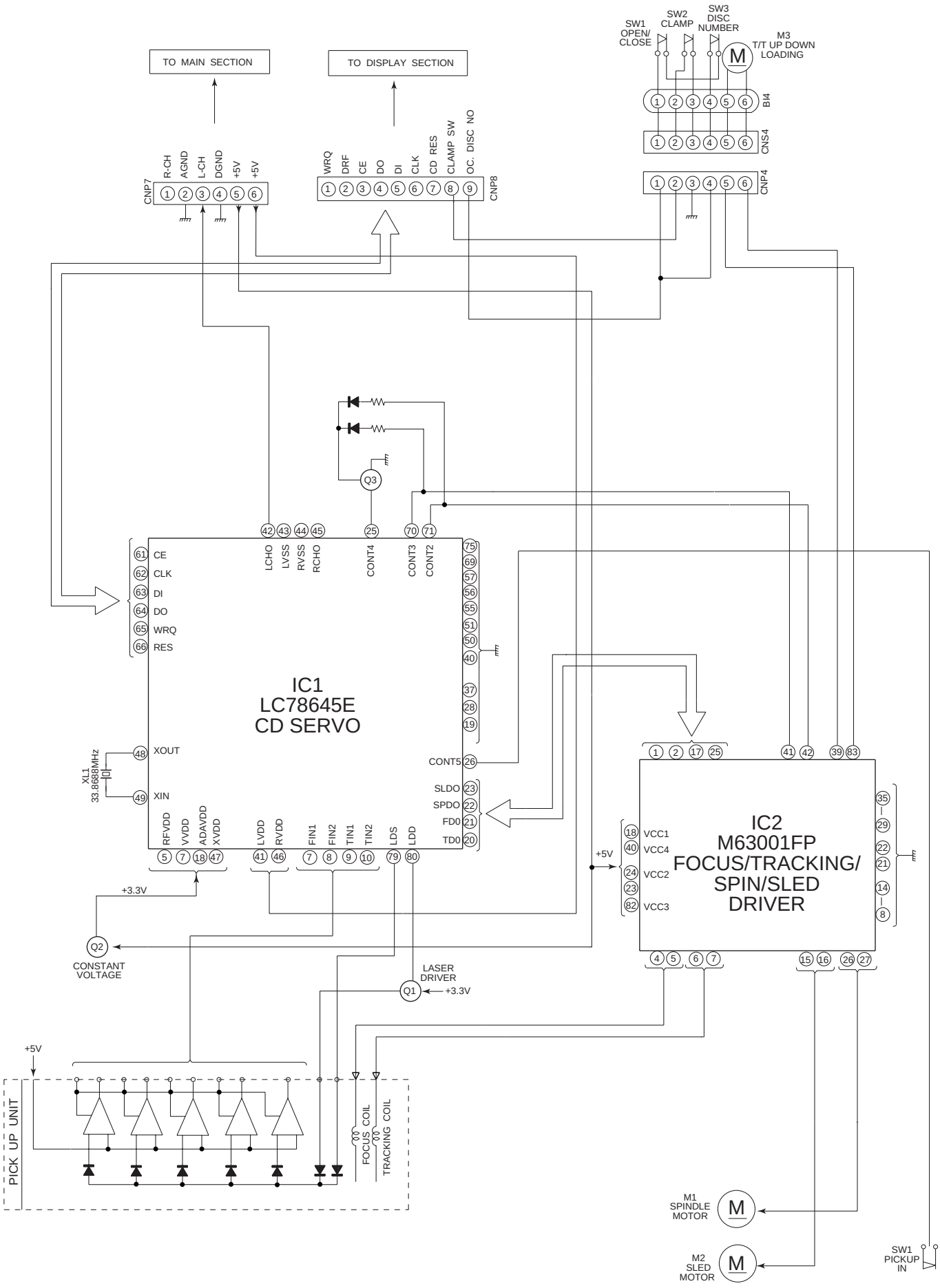


Figure 17 BLOCK DIAGRAM (1/3)

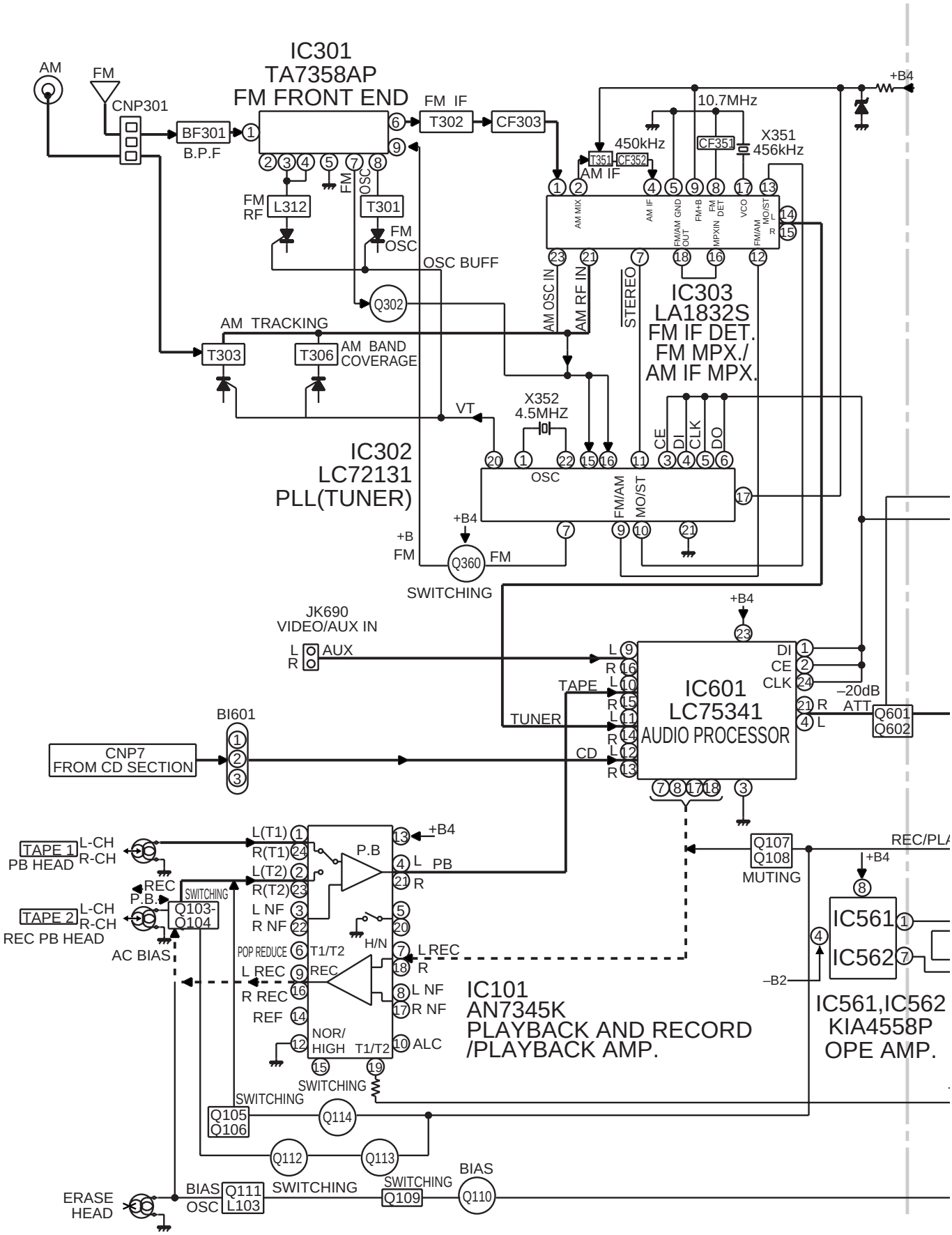


Figure 18 BLOCK DIAGRAM (2/3)

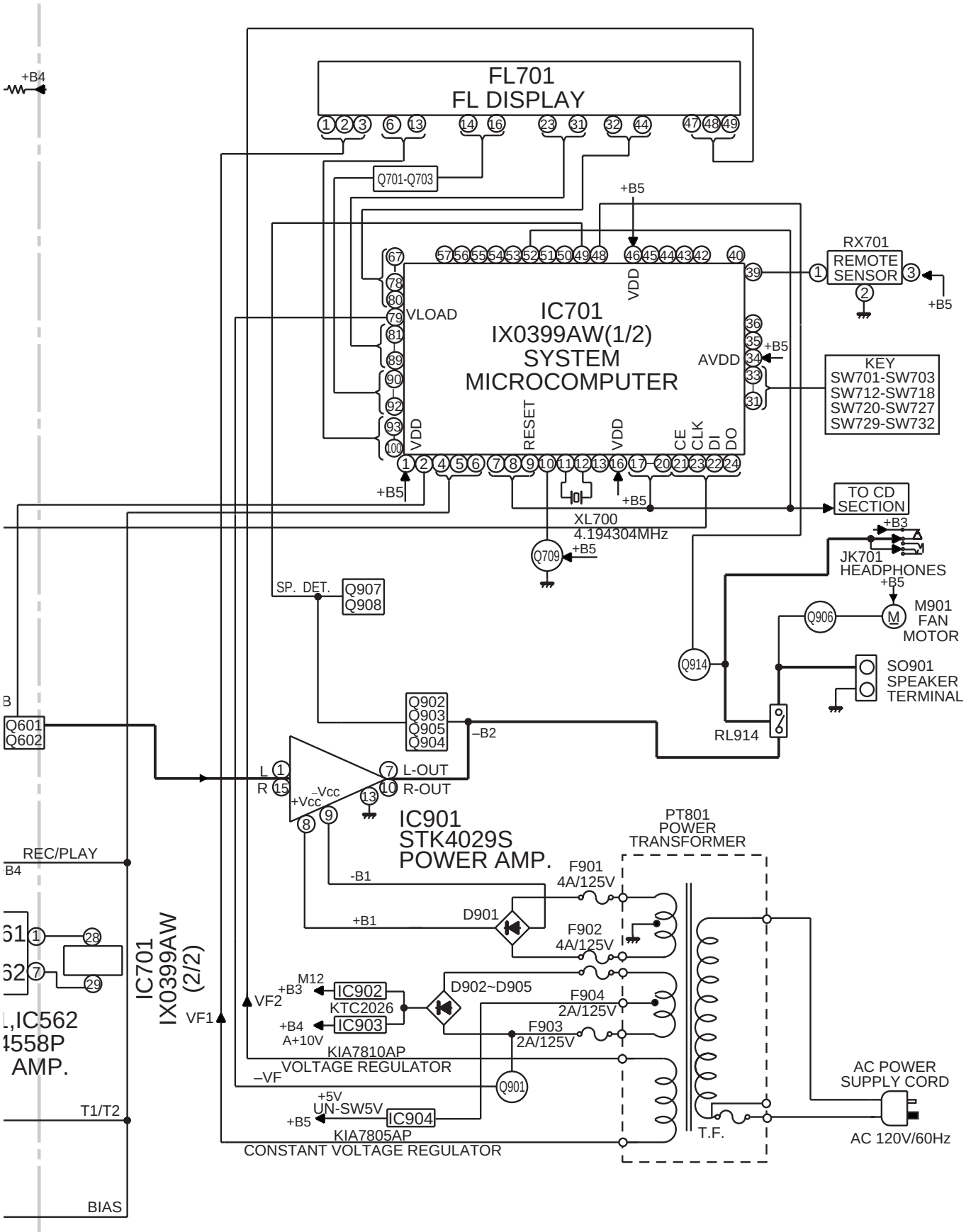
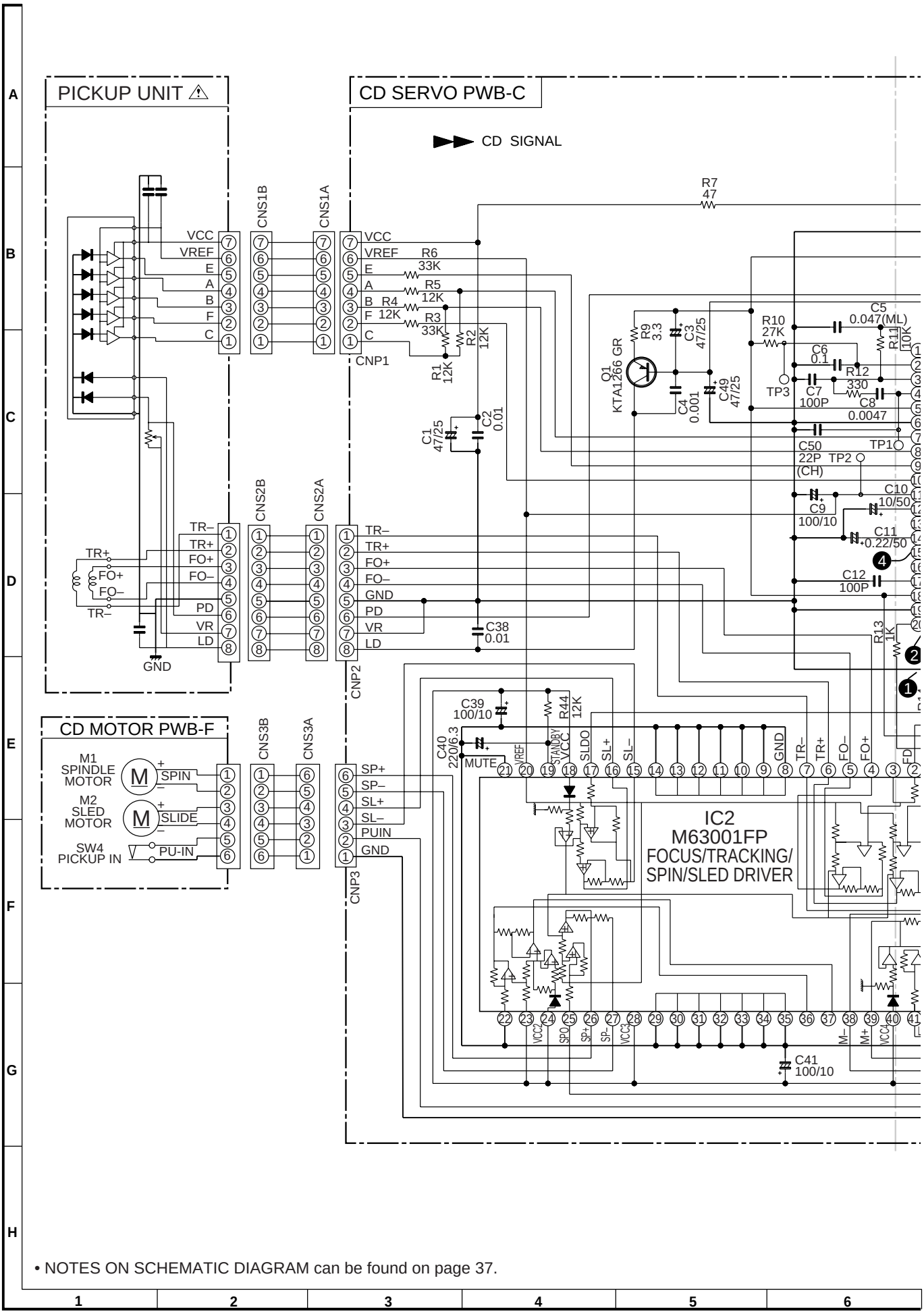
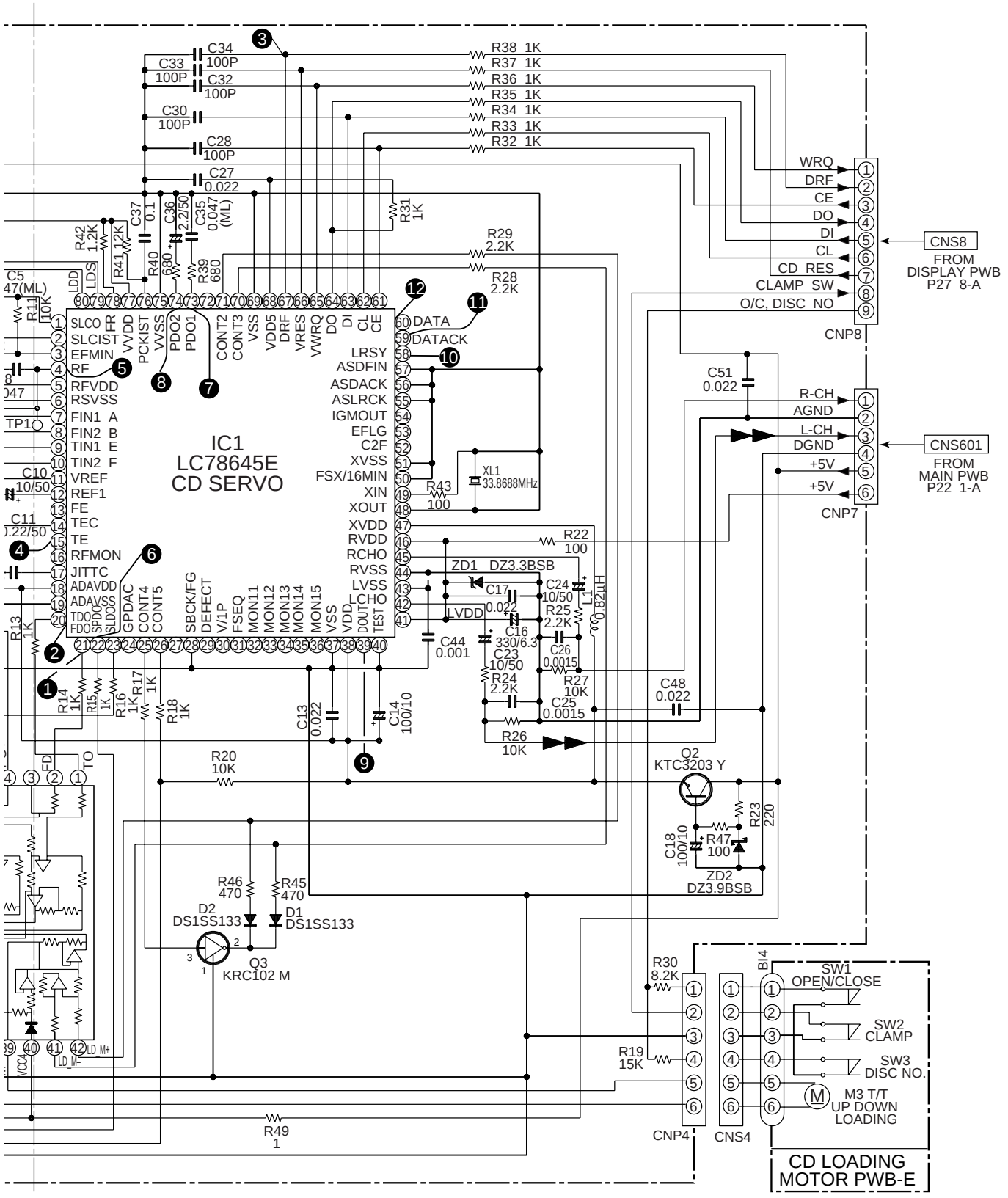


Figure 19 BLOCK DIAGRAM (3/3)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 37.

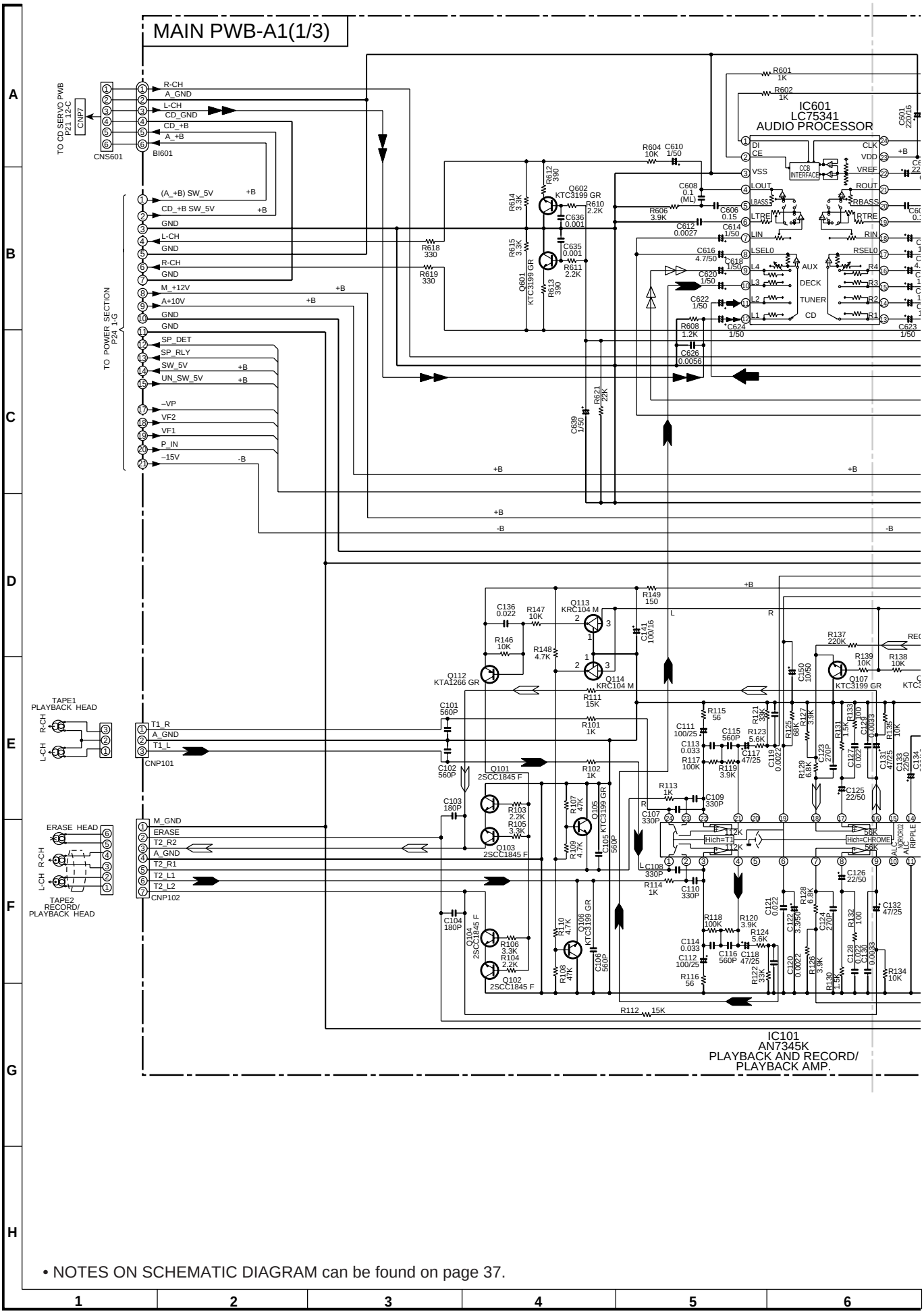
Figure 20 SCHEMATIC DIAGRAM (1/9)



• The numbers ❶ to ⓬ are waveform numbers shown in page 38.

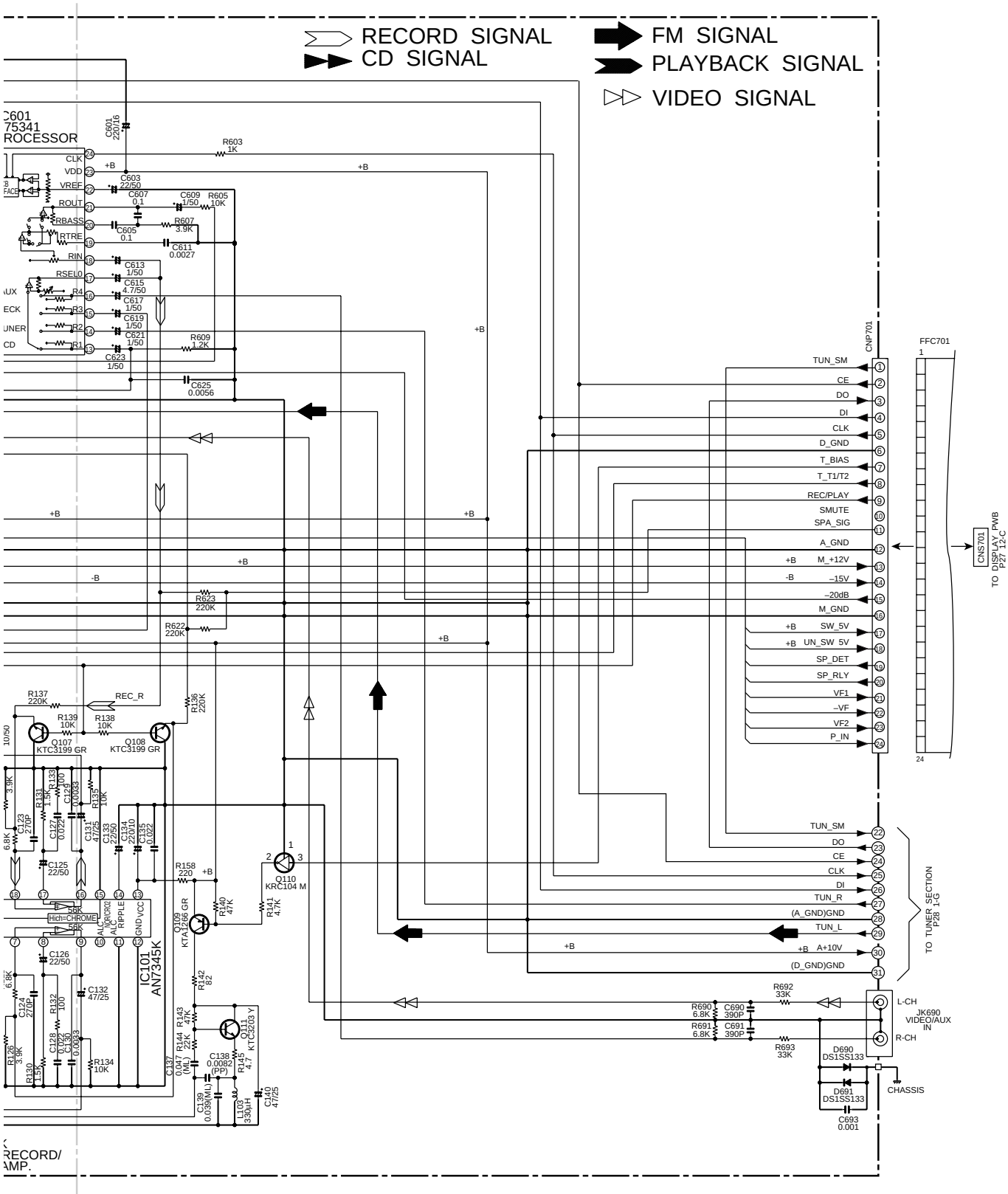
7	8	9	10	11	12

Figure 21 SCHEMATIC DIAGRAM (2/9)



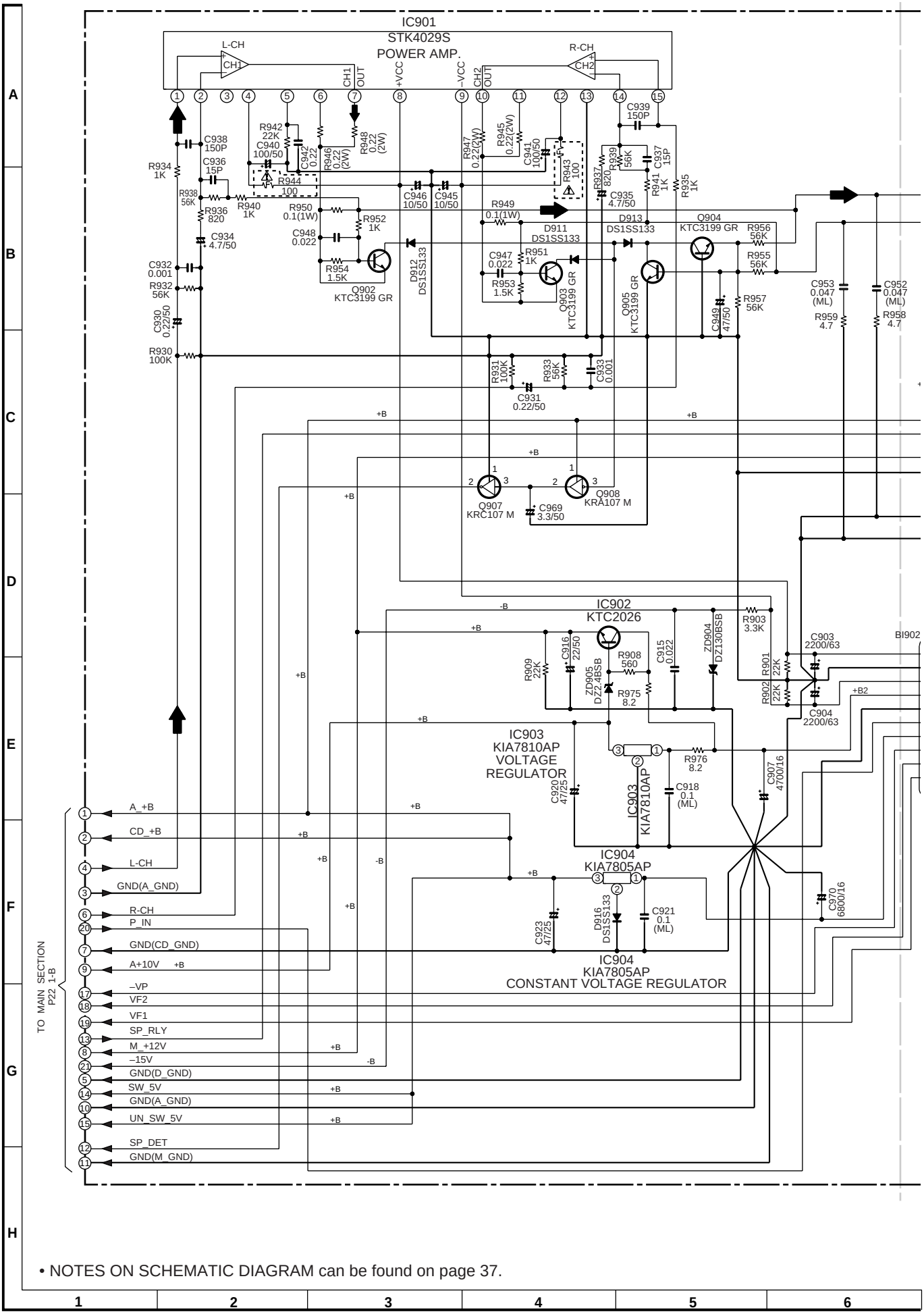
• NOTES ON SCHEMATIC DIAGRAM can be found on page 37.

Figure 22 SCHEMATIC DIAGRAM (3/9)



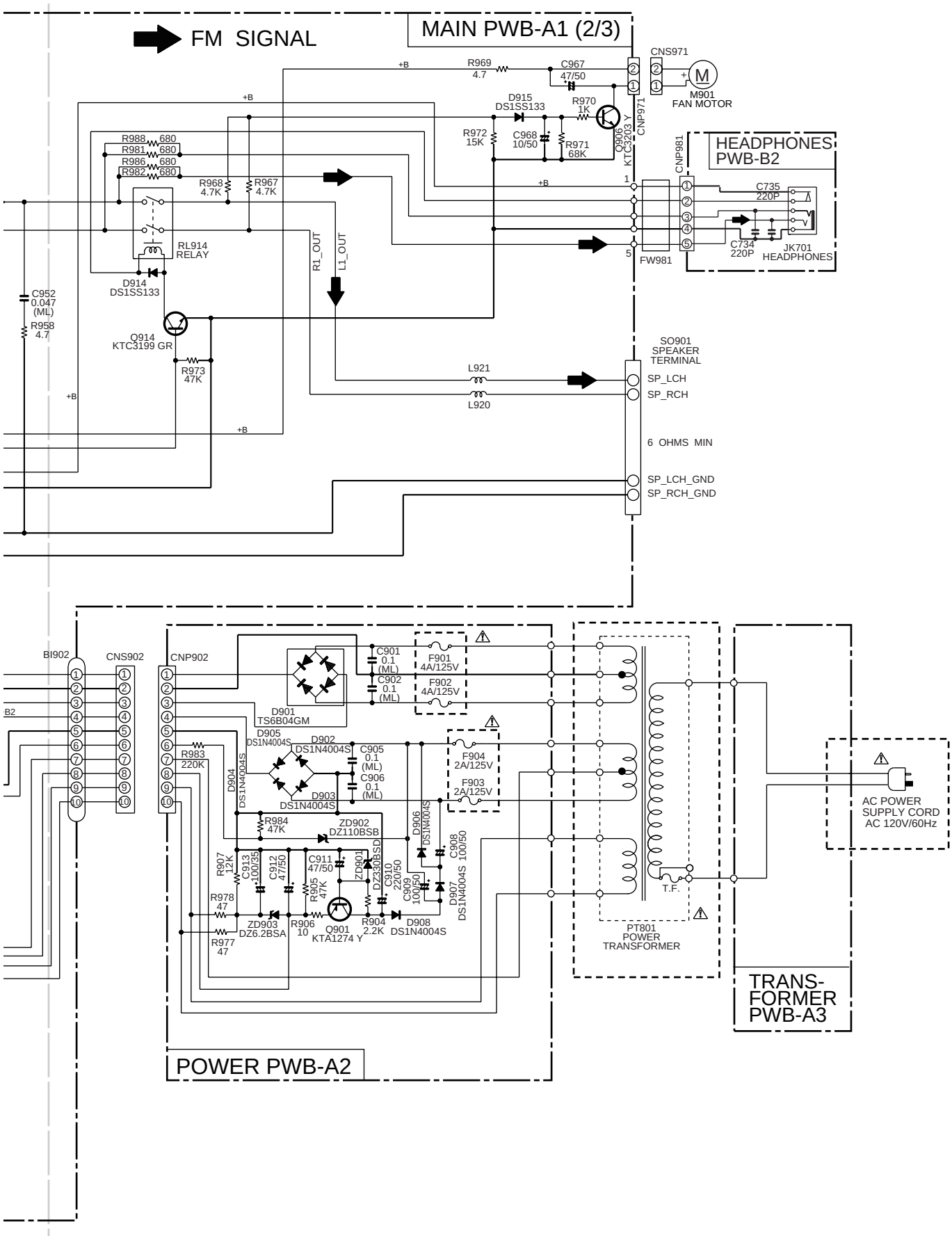
7	8	9	10	11	12

Figure 23 SCHEMATIC DIAGRAM (4/9)



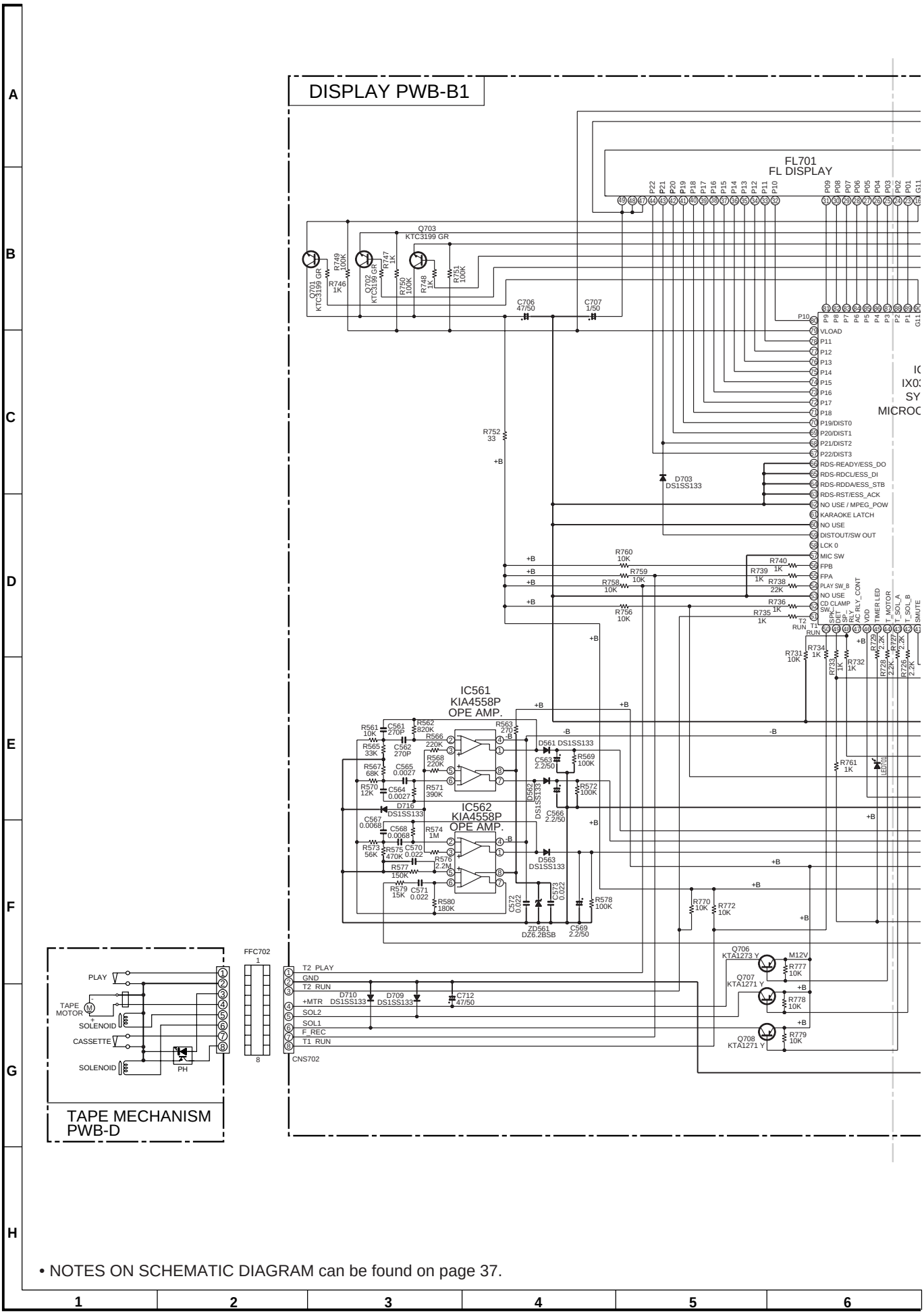
• NOTES ON SCHEMATIC DIAGRAM can be found on page 37.

Figure 24 SCHEMATIC DIAGRAM (5/9)



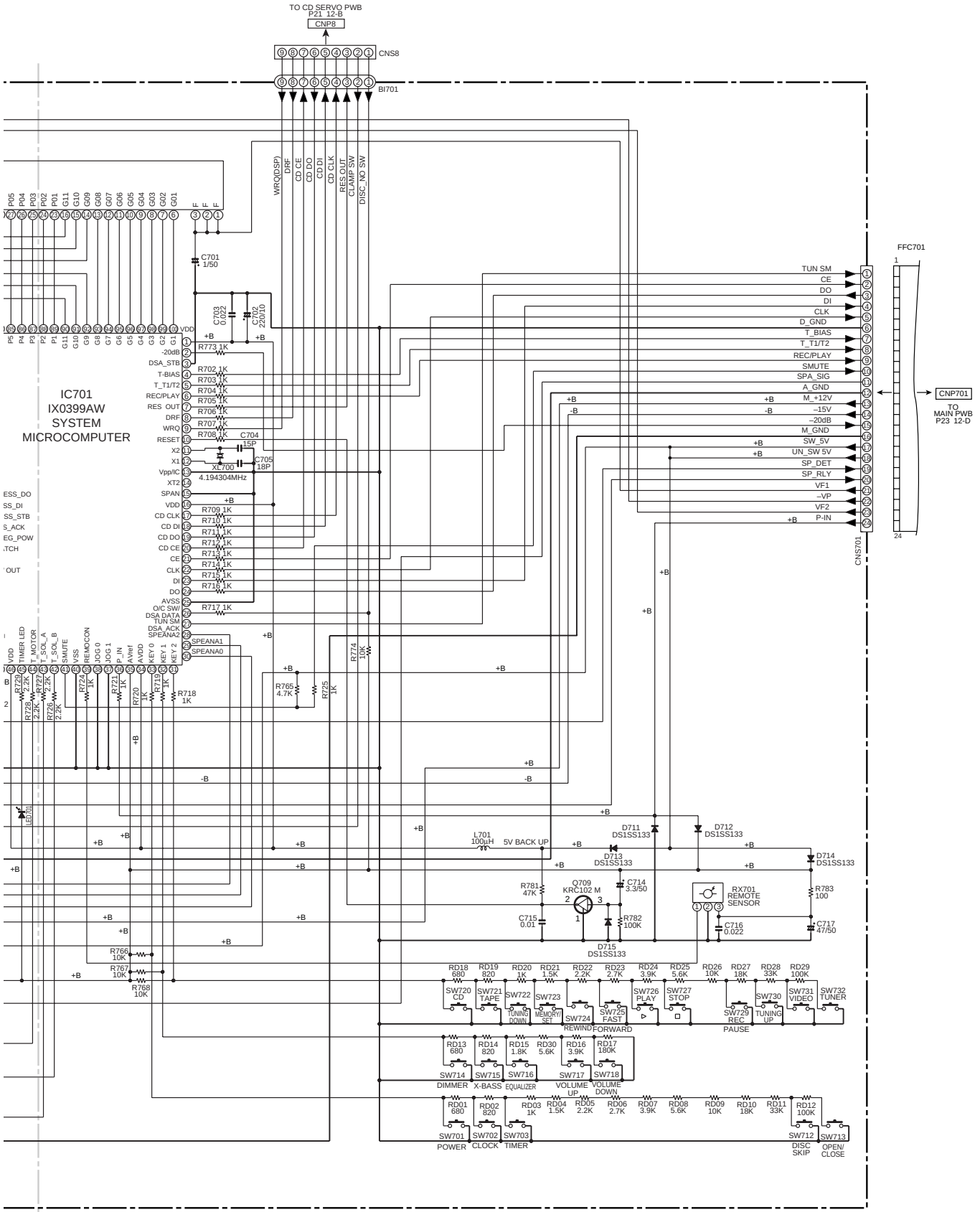
7	8	9	10	11	12

Figure 25 SCHEMATIC DIAGRAM (6/9)



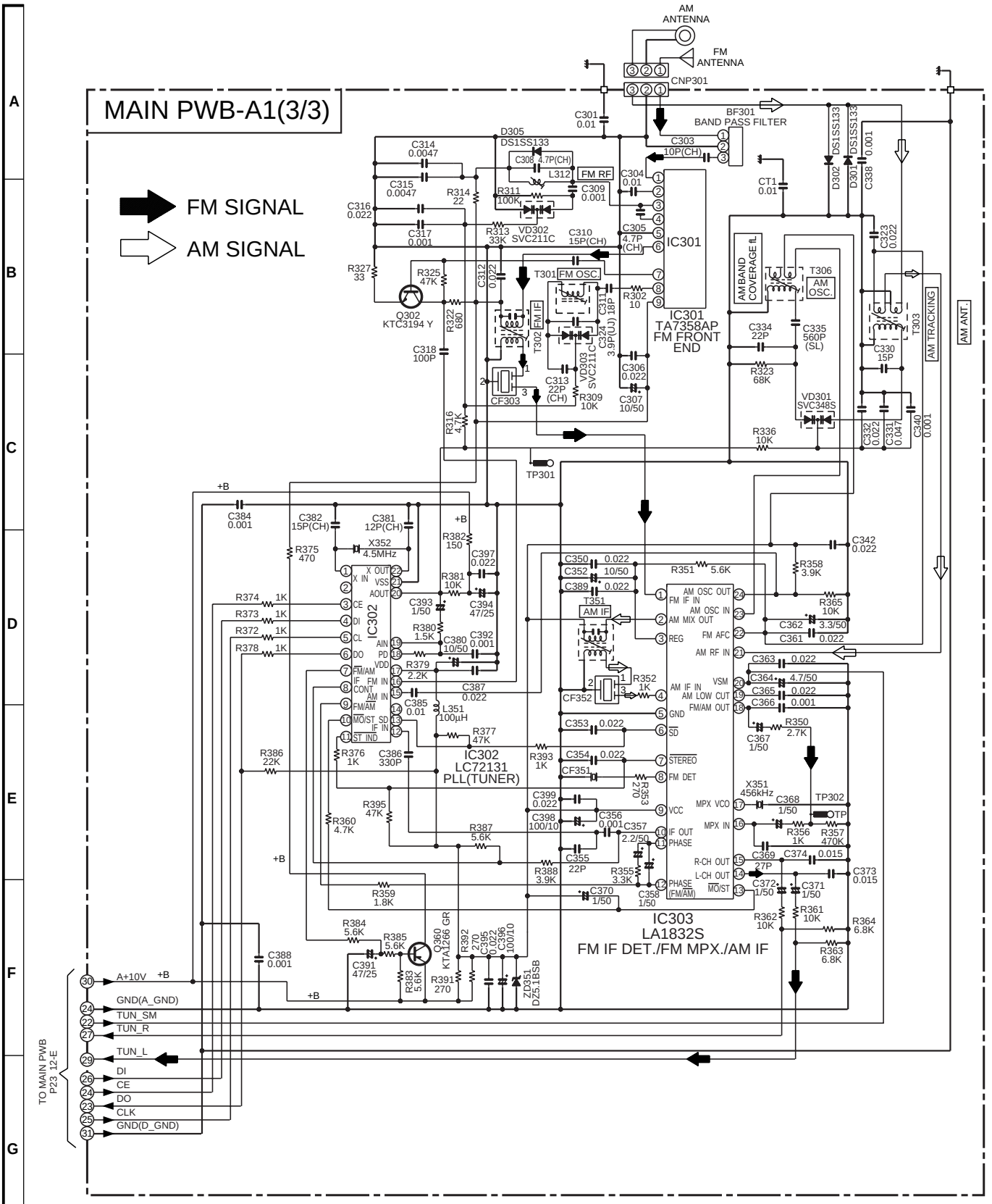
• NOTES ON SCHEMATIC DIAGRAM can be found on page 37.

Figure 26 SCHEMATIC DIAGRAM (7/9)



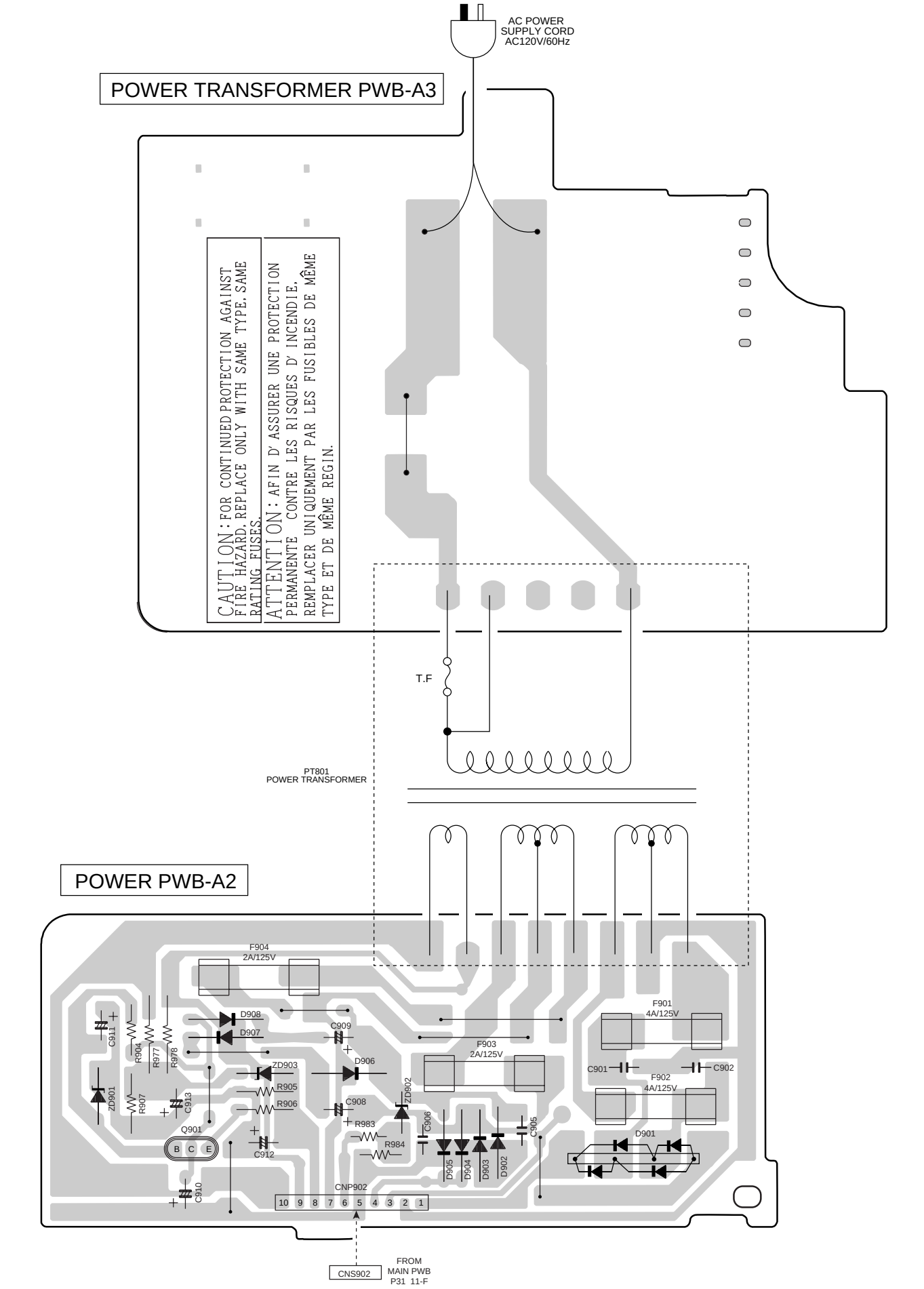
7	8	9	10	11	12

Figure 27 SCHEMATIC DIAGRAM (8/9)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 37.

Figure 28 SCHEMATIC DIAGRAM (9/9)



7	8	9	10	11	12

Figure 29 WIRING SIDE OF P.W.BOARD (1/7)

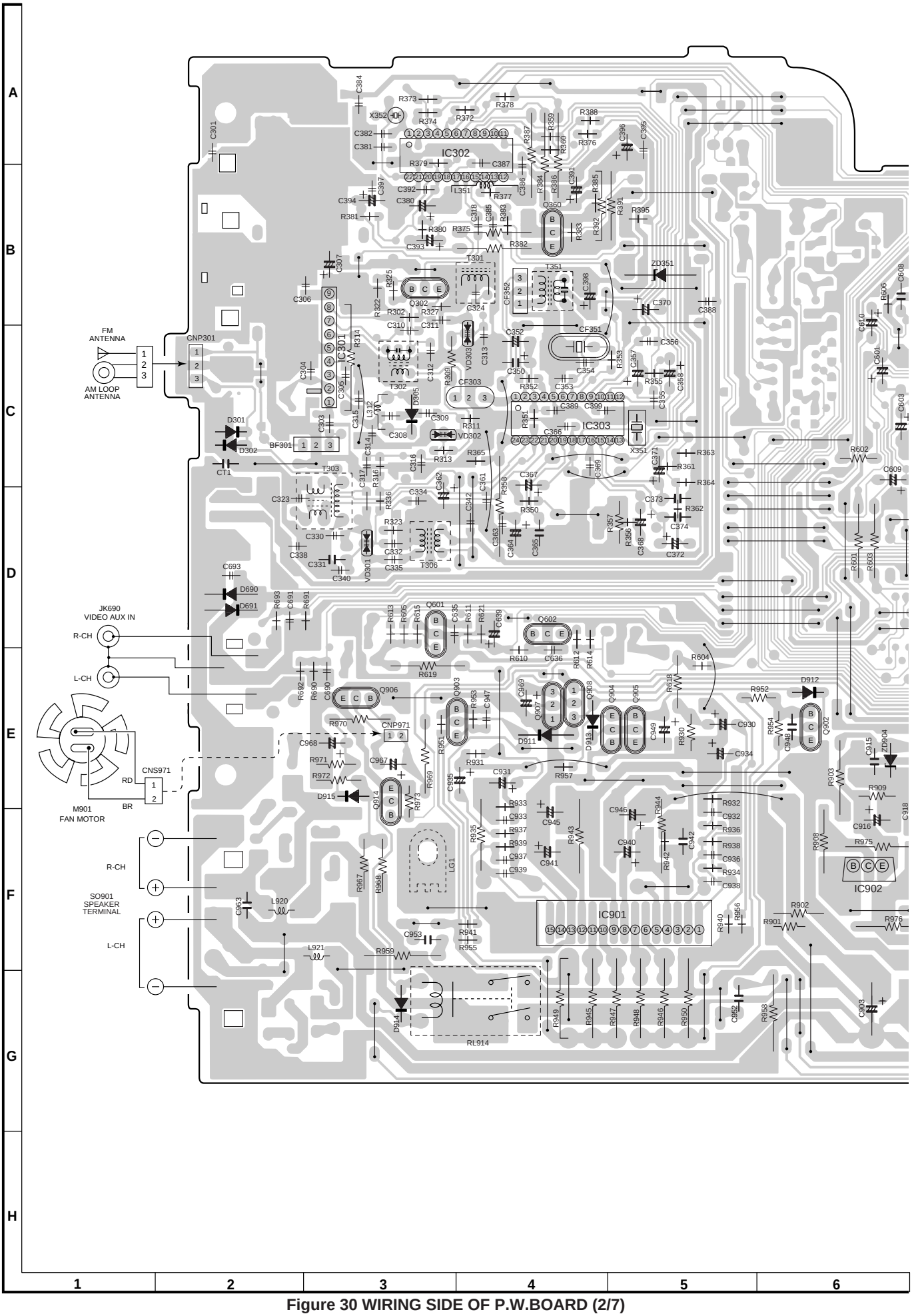
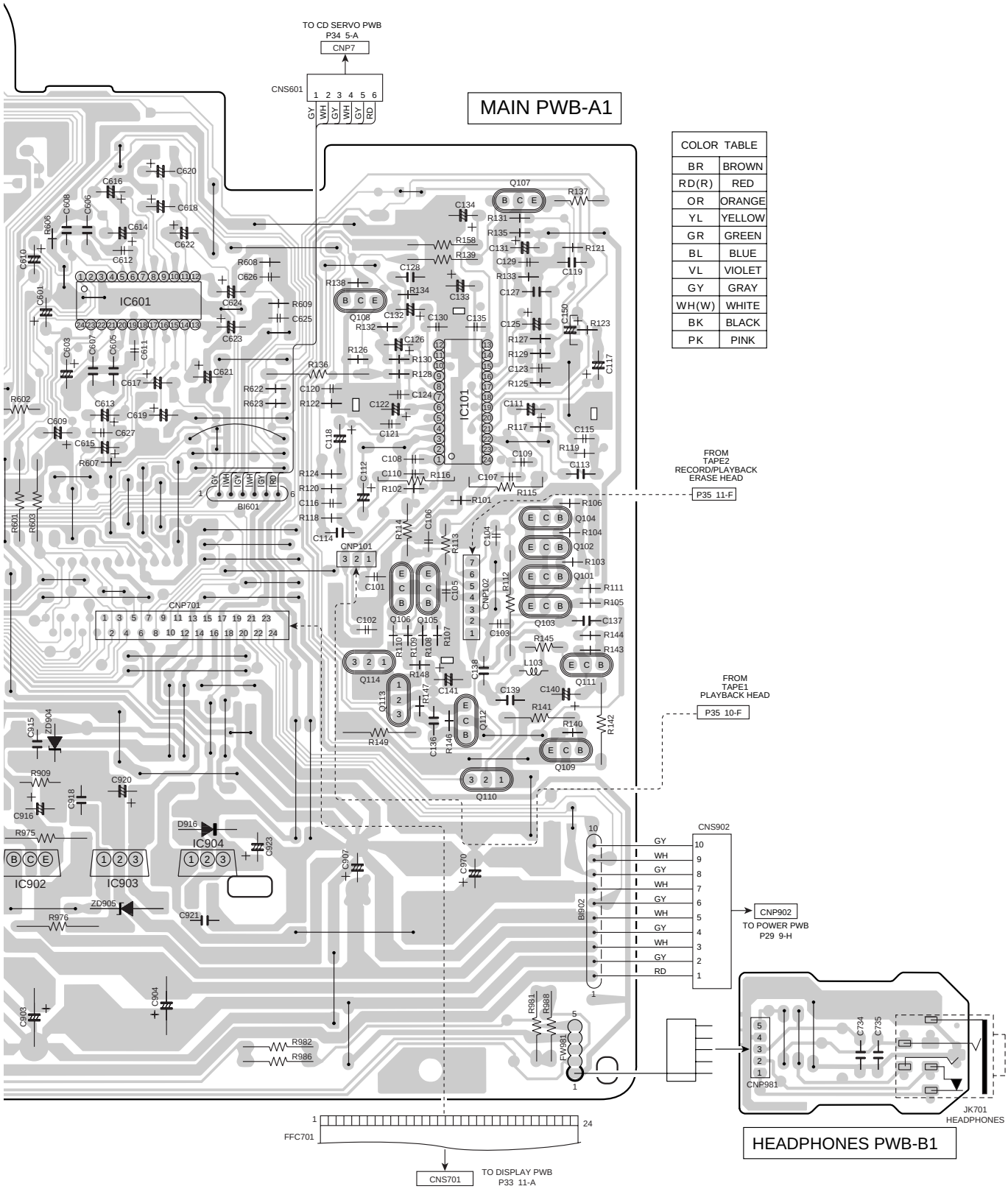


Figure 30 WIRING SIDE OF P.W.BOARD (2/7)



7	8	9	10	11	12

Figure 31 WIRING SIDE OF P.W.BOARD (3/7)

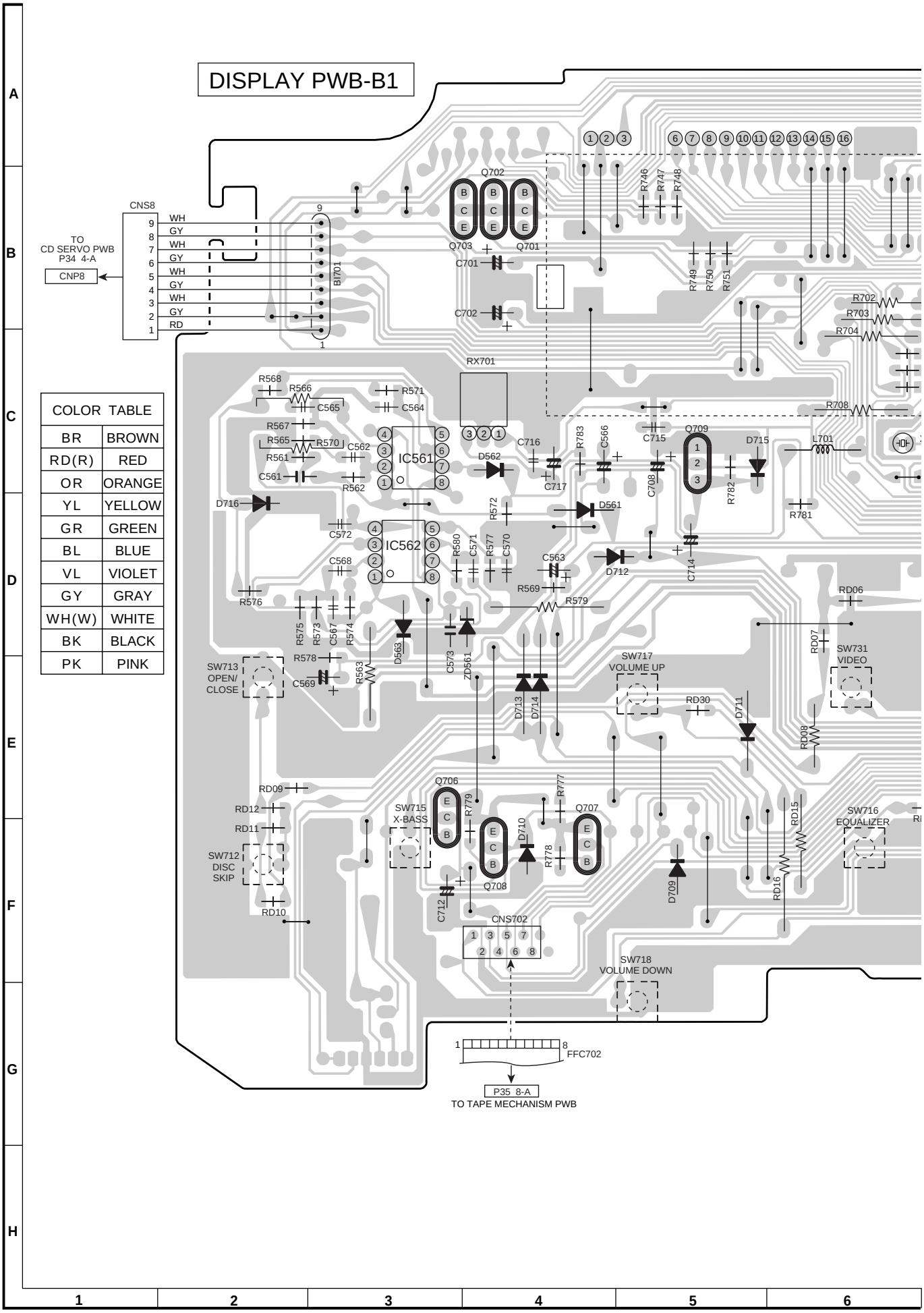
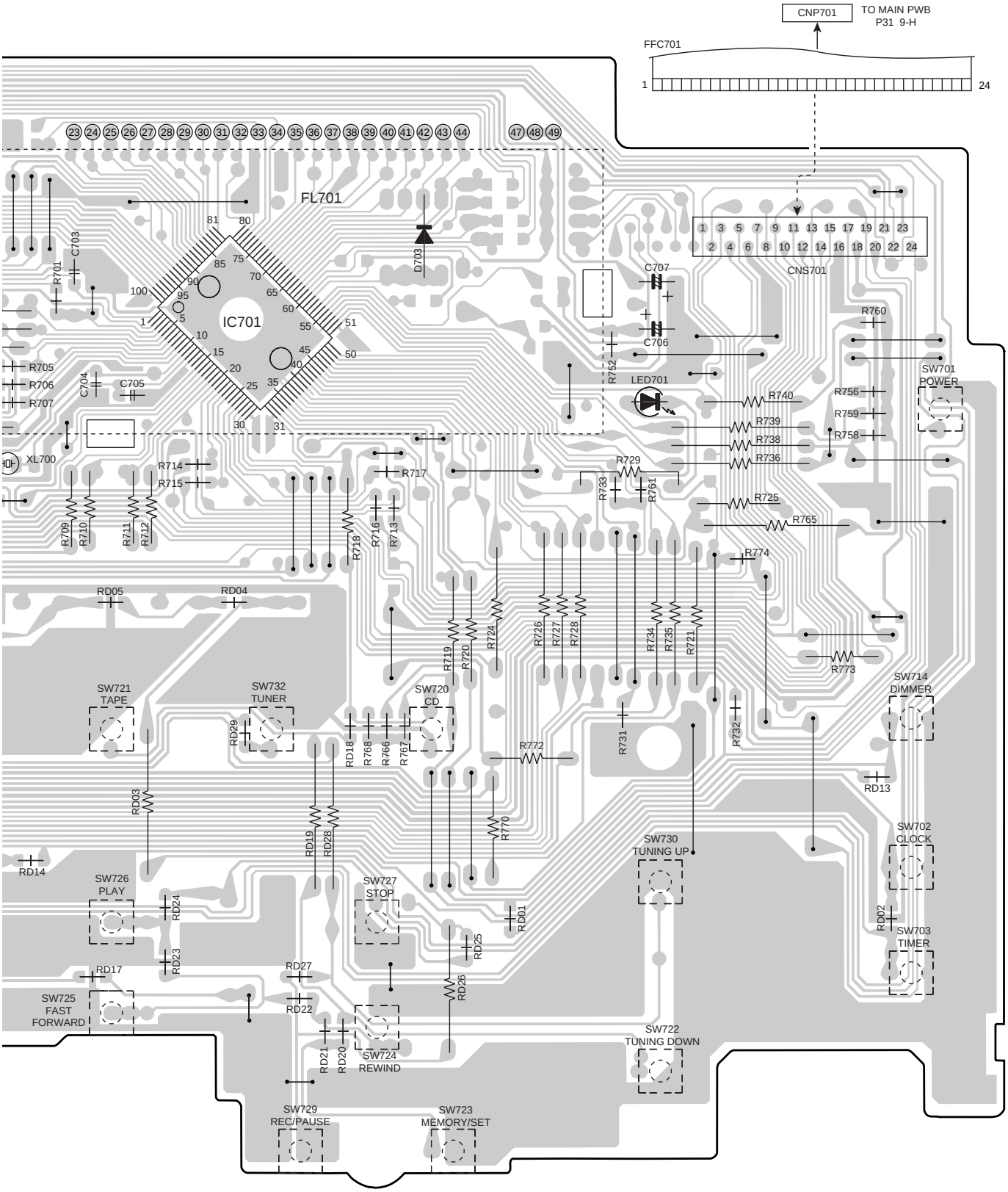
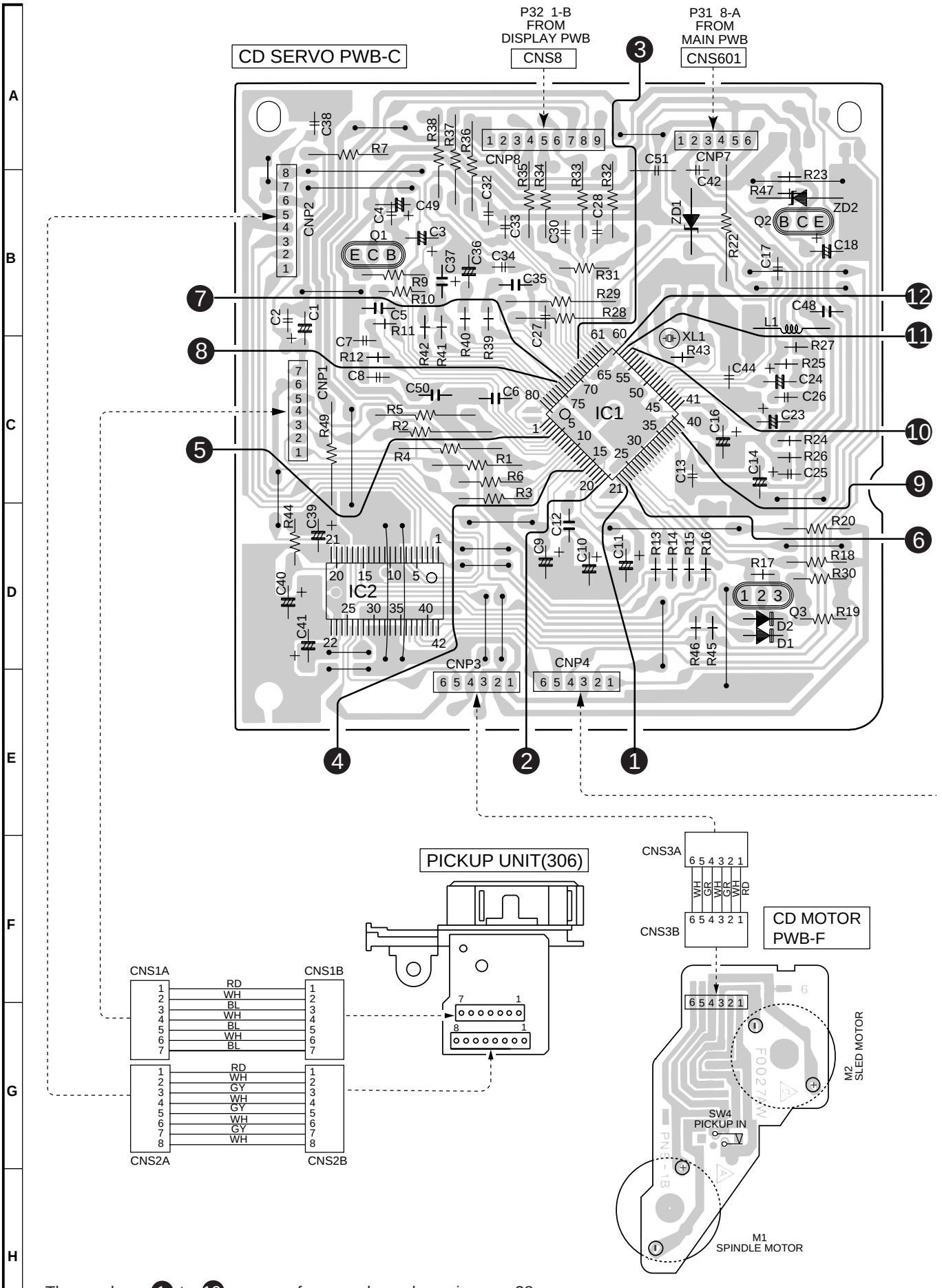


Figure 32 WIRING SIDE OF P.W.BOARD (4/7)



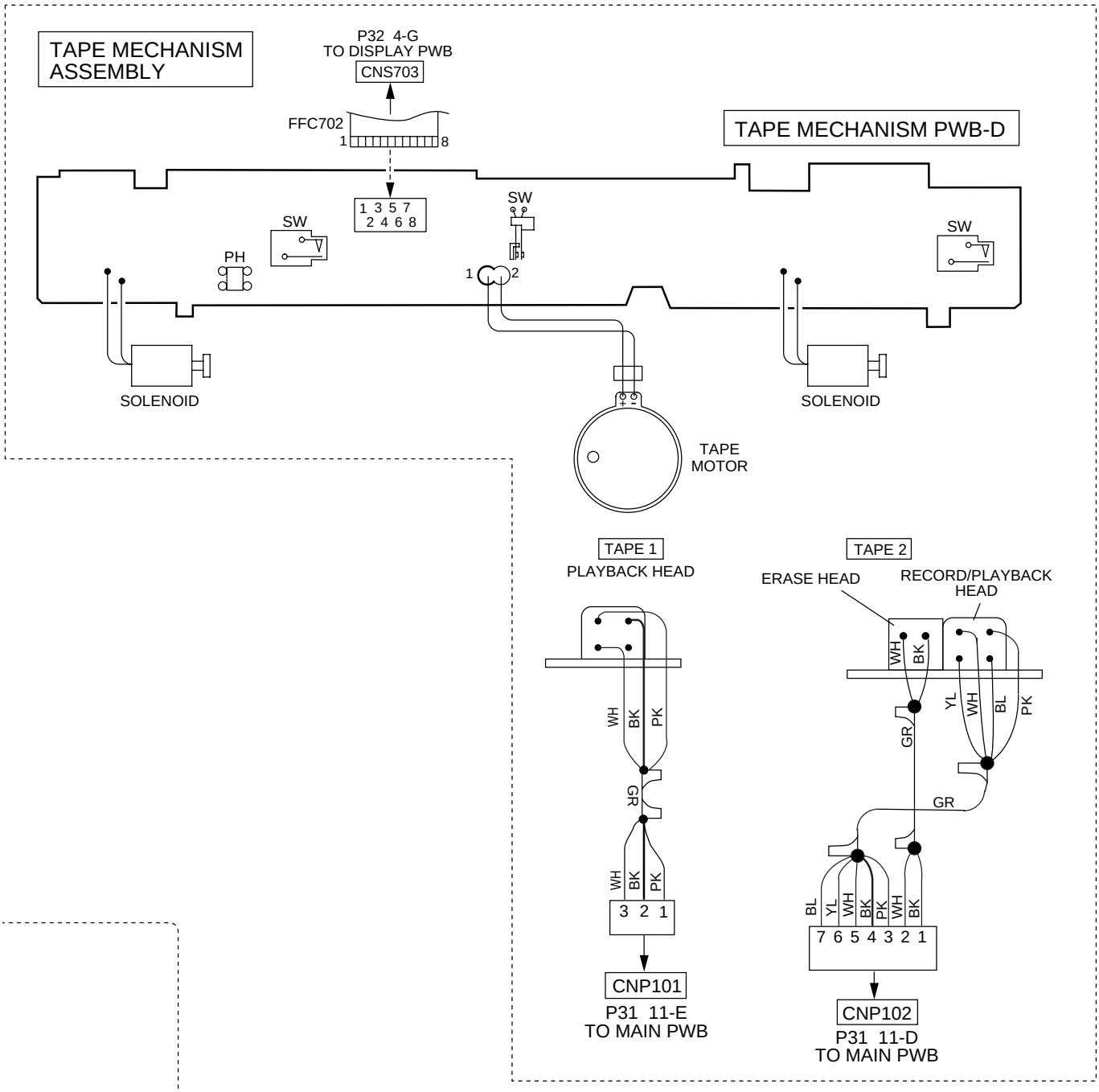
7	8	9	10	11	12

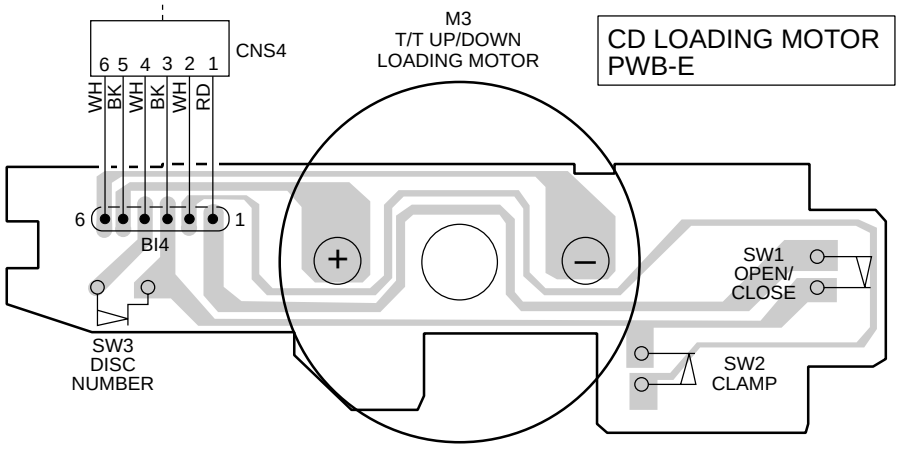
Figure 33 WIRING SIDE OF P.W.BOARD (5/7)



• The numbers ❶ to ⓬ are waveform numbers shown in page 38.

Figure 34 WIRING SIDE OF P.W.BOARD (6/7)





COLOR TABLE	
BR	BROWN
RD(R)	RED
OR	ORANGE
YL	YELLOW
GR	GREEN
BL	BLUE
VL	VIOLET
GY	GRAY
WH(W)	WHITE
BK	BLACK
PK	PINK

7	8	9	10	11	12

Figure 35 WIRING SIDE OF P.W.BOARD (7/7)

VOLTAGE

IC1

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	1.6V	41	3.7V
2	1.0V	42	3.7V
3	1.6V	43	0V
4	1.8V	44	0V
5	3.3V	45	3.7V
6	0V	46	3.2V
7	1.6V	47	3.2V
8	1.6V	48	3.2V
9	1.6V	49	0V
10	1.6V	50	0V
11	1.6V	51	0V
12	1.6V	52	3.2V
13	1.5V	53	0V
14	1.5V	54	0V
15	1.5V	55	0V
16	1.5V	56	0V
17	0.8V	57	0V
18	3.2V	58	3.2V
19	0V	59	0V
20	1.6V	60	0V
21	1.6V	61	0V
22	1.6V	62	4.7V
23	1.6V	63	0V
24	0V	64	4.9V
25	0V	65	4.9V
26	3.2V	66	4.9V
27	0V	67	0V
28	0V	68	4.9V
29	0V	69	0V
30	0V	70	0V
31	0V	71	0V
32	0V	72	0V
33	0V	73	0V
34	0V	74	0V
35	1.6V	75	0V
36	0V	76	3.2V
37	0V	77	3.2V
38	3.2V	78	3.2V
39	3.2V	79	0V
40	0V	80	3.2V

IC2

PIN NO.	VOLTAGE
1	1.7V
2	1.7V
3	1.8V
4	2.1V
5	2.1V
6	2.1V
7	2.0V
8	0V
9	0V
10	0V
11	0V
12	0V
13	0V
14	0V
15	2.1V
16	2.1V
17	1.6V
18	4.9V
19	3.0V
20	1.6V
21	0V
22	0V
23	4.9V
24	4.9V
25	1.8V
26	2.1V
27	2.1V
28	0V
29	0V
30	0V
31	0V
32	0V
33	0V
34	0V
35	0V
36	4.2V
37	0V
38	2.1V
39	2.1V
40	4.9V
41	3.7V
42	3.7V

IC303

PIN NO.	VOLTAGE
1	2.09V
2	5.17V
3	2.09V
4	2.08V
5	0V
6	5.15V
7	5.15V
8	3.02V
9	5.17V
10	4.35V
11	4.01V
12	4.01V
13	4.10V
14	1.18V
15	1.19V
16	2.08V
17	1.79V
18	1.79V
19	0V
20	0.58V
21	2.60V
22	2.96V
23	5.17V
24	3.64V

IC701

PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	4.77V	51	5.28V
2	4.68V	52	0V
3	0V	53	0V
4	0V	54	5.25V
5	4.67V	55	5.28V
6	4.72V	56	5.28V
7	4.74V	57	0V
8	0V	58	0.31V
9	5.41V	59	0V
10	4.86V	60	0V
11	2.3V	61	0V
12	2V	62	0V
13	0V	63	0V
14	4.76V	64	0V
15	0V	65	0V
16	4.77V	66	0V
17	4.7V	67	–28.82V
18	0V	68	–28.82V
19	5.36V	69	–28.8V
20	0.16V	70	–28.88V
21	0V	71	–28.79V
22	0V	72	–28.8V
23	0V	73	–18.2V
24	0V	74	–18.74V
25	0V	75	–26.3V
26	2.3V	76	–23.77V
27	0.22V	77	0V
28	0V	78	–21.2V
29	0V	79	–28.9V
30	0V	80	–26.2V
31	5.03V	81	–26.3V
32	5.03V	82	–26.3V
33	5.03V	83	–21.28V
34	4.77V	84	–28.83V
35	5.04V	85	0V
36	2.48V	86	0V
37	0V	87	–18.73V
38	0V	88	0V
39	4.92V	89	0V
40	0V	90	–26.28V
41	5.67V	91	–26.28V
42	12.5V	92	–26.24V
43	12.52V	93	–26.32V
44	12.5V	94	–26.3V
45	3.8V	95	–26.29V
46	4.78V	96	–26.3V
47	4.78V	97	–26.3V
48	4.5V	98	–26.3V
49	5.04V	99	–26.28V
50	5.28V	100	–26.3V

IC101

PIN NO.	VOLTAGE
1	0V
2	0V
3	0.57V
4	2.0V
5	0.59V(AC)
6	1.32V
7	0V
8	0.59V
9	3.45V
10	3.42V
11	0V
12	0V
13	6.92V
14	4.13V
15	0V
16	3.43V
17	0.59V
18	0V
19	2.63V
20	0.56V(AC)
21	2.00V
22	0.57V
23	0V
24	0V

IC302

PIN NO.	VOLTAGE
1	2.55V
2	0V
3	0V
4	0V
5	0V
6	5.16V
7	0V
8	4.69V
9	4.02V
10	4.10V
11	5.15V
12	0V
13	5.15V
14	0V
15	0V
16	2.53V
17	5.16V
18	0.90V
19	0.90V
20	1.31V
21	0V
22	2.55V

IC301

PIN NO.	VOLTAGE
1	0.91V
2	1.64V
3	5.40V
4	1.62V
5	0V
6	5.41V
7	4.65V
8	5.37V
9	5.41V

IC561

PIN NO.	VOLTAGE
1	0.17V
2	0.2V
3	0.19V
4	–13.11V
5	0.19V
6	0.2V
7	0.17V
8	0V
9	6.23V

IC601

PIN NO.	VOLTAGE
1	0V
2	0V
3	0V
4	5.03V
5	5.00V
6	5.01V
7	5.01V
8	5.03V
9	5.01V
10	5.01V
11	5.01V
12	5.01V
13	5.01V
14	5.01V
15	5.01V
16	5.01V
17	5.03V
18	5.01V
19	5.01V
20	5.00V
21	5.04V
22	5.03V
23	10.03V
24	0V

IC562

PIN NO.	VOLTAGE
1	0.26V
2	0.3V
3	0.3V
4	–13.11V
5	0V
6	0V
7	0V
8	6.23V

IC901

PIN NO.	VOLTAGE
1	0V
2	0V
3	0V
4	50.1V
5	–48.8V
6	0V
7	0V
8	51.8V
9	–51.5V
10	0V
11	0V
12	–50.1V
13	0V
14	0V
15	0V

IC902

PIN NO.	VOLTAGE
1	12.56V
2	24.75V
3	13.17V

IC903

PIN NO.	VOLTAGE
1	24.70V
2	0V
3	10.04V

IC904

PIN NO.	VOLTAGE
1	12.21V
2	0.66V
3	5.68V

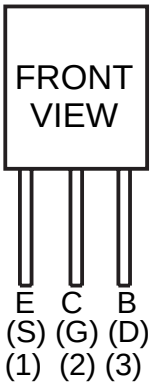
NOTES ON SCHEMATIC DIAGRAM

- Resistor:
  To differentiate the units of resistors, such symbol as K and M are used: the symbol K means 1000 ohm and the symbol M means 1000 kohm and the resistor without any symbol is ohm-type resistor. Besides, the one with “Fusible” is a fuse type.
- Capacitor:
  To indicate the unit of capacitor, a symbol P is used: this symbol P means pico-farad and the unit of the capacitor without such a symbol is microfarad. As to electrolytic capacitor, the expression “capacitance/withstand voltage” is used.
  (CH), (TH), (RH), (UJ): Temperature compensation
  (ML): Mylar type
  (P.P.): Polypropylene type
- Schematic diagram and Wiring Side of P.W.Board for this model are subject to change for improvement without prior notice.
- The indicated voltage in each section is the one measured by Digital Multimeter between such a section and the chassis with no signal given.
  1. In the tuner section,
     ( ) indicates AM
     < > indicates FM stereo
  2. In the main section, a tape is being played back.
  3. In the deck section, a tape is being played back.
     ( ) indicates the record state.
  4. In the power section, a tape is being played back.
  5. In the CD section, the CD is stopped.
- Parts marked with “ ⚠ ” (⊏ ═ ═ ═ ⊐) are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

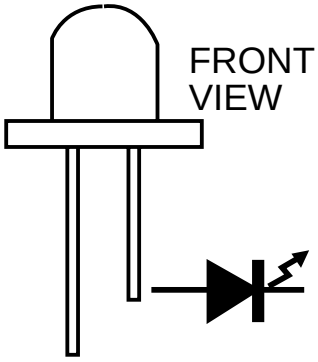
REF. NO	DESCRIPTION	POSITION
SW1	OPEN/CLOSE	ON—OFF
SW2	CLAMP	ON—OFF
SW3	DISC NUMBER	ON—OFF
SW4	PICKUP IN	ON—OFF
SW701	POWER	ON—OFF
SW702	CLOCK	ON—OFF
SW703	TIMER/SLEEP	ON—OFF
SW712	DISC SKIP	ON—OFF
SW713	OPEN/CLOSE	ON—OFF
SW714	DIMMER	ON—OFF
SW715	X-BASS	ON—OFF
SW716	EQUALIZER	ON—OFF
SW717	VOLUME UP	ON—OFF

REF. NO	DESCRIPTION	POSITION
SW718	VOLUME DOWN	ON—OFF
SW720	CD	ON—OFF
SW721	TAPE	ON—OFF
SW722	TUNING DOWN	ON—OFF
SW723	MEMORY SET	ON—OFF
SW724	REWIND	ON—OFF
SW725	FAST FORWARD	ON—OFF
SW726	PLAY	ON—OFF
SW727	STOP	ON—OFF
SW729	REC/PAUSE	ON—OFF
SW730	TUNING UP	ON—OFF
SW731	VIDEO	ON—OFF
SW732	TUNER	ON—OFF

TYPES OF TRANSISTOR AND LED



KTA1266 GR	KTA1273 Y
KRC102 M	KTC3203 Y
KRC104 M	KTC3199 GR
KTA1271 Y	KRA107 M
KTA1274 Y	KRC107 M
2SC1845 F	KTC3194 Y

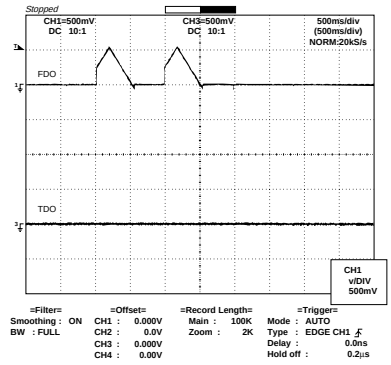


SLR342VCJ1

WAVEFORMS OF CD CIRCUIT

1 IC1 (21)

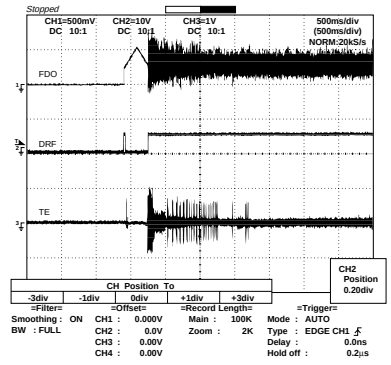
2 IC1 (20)


Stopped
CH1=500mV DC 10:1
CH3=500mV DC 10:1
500ms/div (500ms/div) NORM:20kS/s
FDO
TDO
CH1 v/DIV 500mV
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000V CH2 : 0.0V CH3 : 0.000V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2K
=Trigger= Mode : AUTO Type : EDGE CH1 Delay : 0.0ns Hold off : 0.2µs

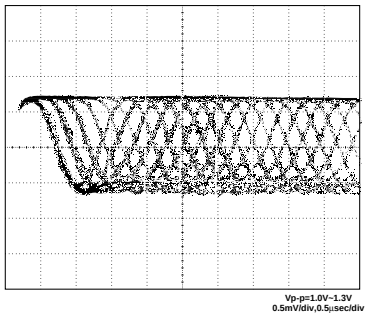
1 IC1 (21)

3 IC1 (67)

4 IC1 (15)

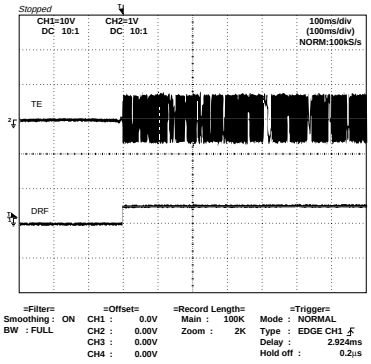

Stopped
CH1=500mV DC 10:1
CH2=10V DC 10:1
CH3=1V DC 10:1
500ms/div (500ms/div) NORM:20kS/s
FDO
DRF
TE
CH Position To
-3div -1div 0div +1div +3div
CH2 Position 0.20div
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000V CH2 : 0.0V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2K
=Trigger= Mode : AUTO Type : EDGE CH1 Delay : 0.0ns Hold off : 0.2µs

5 IC1 (4)



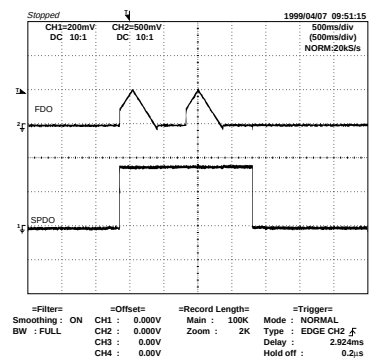
4 IC1 (15)

3 IC1 (67)


Stopped
CH1=10V DC 10:1
CH2=1V DC 10:1
100ms/div (100ms/div) NORM:100kS/s
TE
DRF
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.0V CH2 : 0.00V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2K
=Trigger= Mode : NORMAL Type : EDGE CH1 Delay : 2.924ms Hold off : 0.2µs

1 IC1 (21)

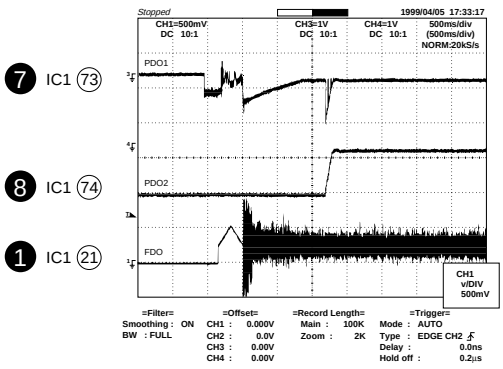
6 IC1 (22)


Stopped
1999/04/07 09:51:15
CH1=200mV DC 10:1
CH2=500mV DC 10:1
500ms/div (500ms/div) NORM:20kS/s
FDO
SPDO
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000V CH2 : 0.000V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2K
=Trigger= Mode : NORMAL Type : EDGE CH2 Delay : 2.924ms Hold off : 0.2µs

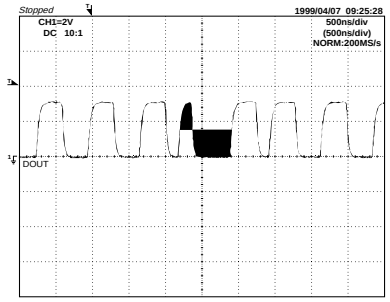
7 IC1 (73)

8 IC1 (74)

1 IC1 (21)


Stopped
1999/04/05 17:33:17
CH1=500mV DC 10:1
CH3=1V DC 10:1
CH4=1V DC 10:1
500ms/div (500ms/div) NORM:20kS/s
PDO1
PDO2
FDO
CH1 v/DIV 500mV
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.000V CH2 : 0.0V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 100K Zoom : 2K
=Trigger= Mode : AUTO Type : EDGE CH2 Delay : 0.0ns Hold off : 0.2µs

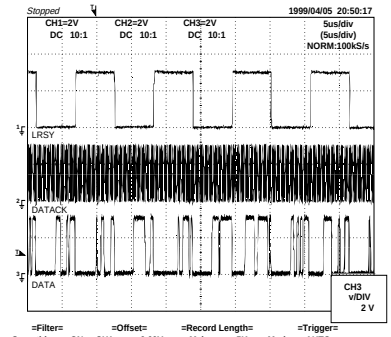
9 IC1 (39)


Stopped
1999/04/07 09:25:28
CH1=2V DC 10:1
500ns/div (500ns/div) NORM:200MS/s
DOUT
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.00V CH2 : 0.00V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 1K Zoom : 100
=Trigger= Mode : NORMAL Type : EDGE CH1 Delay : 2.887ms Hold off : 0.2µs

10 IC1 (58)

11 IC1 (59)

12 IC1 (60)


Stopped
1999/04/05 20:50:17
CH1=2V DC 10:1
CH2=2V DC 10:1
CH3=2V DC 10:1
5us/div (5us/div) NORM:100kS/s
LRSY
DATACK
DATA
CH3 v/DIV 2 V
=Filter= Smoothing : ON BW : FULL
=Offset= CH1 : 0.00V CH2 : 0.00V CH3 : 0.00V CH4 : 0.00V
=Record Length= Main : 5K Zoom : 100
=Trigger= Mode : AUTO Type : EDGE CH3 Delay : 0.0ns Hold off : 0.2µs

TROUBLE SHOOTING

When the CD does not function

When the CD section does not operate when the objective lens of the optical pickup is dirty, this section may not operate. Clean the objective lens, and check the playback operation. When this section does not operate even after the above step is taken, check the following items.
Remove the cabinet and follow the trouble shooting instructions.
"Track skipping and/or no TOC (Table Of Contents) may be caused by build up of dust other foreign matter on the laser pickup lens. Before attempting any adjustment make certain that the lens is clean. If not, clean it as mentioned below."

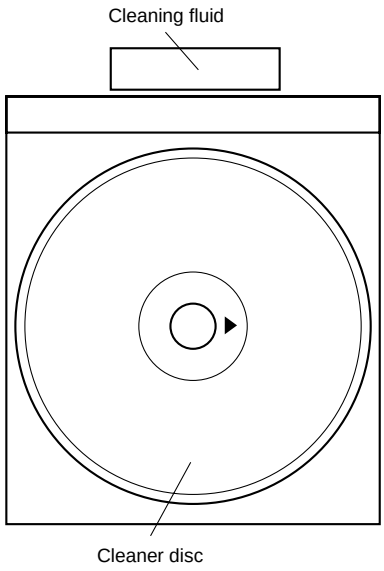
Turn off the power, and wipe the lens softly using a cleaning paper moistened with commercially available cleaning solution so as not to damage it. Be careful not to touch the lens with bare hands.

Dust gradually accumulates on the objective lens during use, and it may degrade performance. To avoid this problem, use a cleaning disc designed for CD optical pickup lenses.

		Parts code
1.	CD optical pickup Lens cleaner disc	UDSKA0004AFZZ

HOW TO USE

1. Using the brush in the cleaner cap, apply 1 or 2 drops of the cleaning fluid to the brush on the CD cleaner disc which has the mark next to it.
2. Place the CD cleaner disc onto the CD disc tray with the brush side down,then press the play button.
3. You will hear music for about 20 seconds and the CD player will automatically stop. If it continuous to turn, press the stop button.



CAUTION

- The CD lens cleaner should be effective for 30-50 operations, however if the brushes become worn out earlier then please the cleaner disc.
- If the CD cleaner brushes become very wet then wipe off any excess fluid with a soft cloth.
- Do not drink the cleaner fluid or allow it to come in contact with the eyes. In the event of this happening then drink and / or rinse with clean water and seek medical advice.
- The CD cleaner disk must not be used on car CD players or on computer CD-ROM drives.
- All rights reserved.Unauthorized duplicating, broadcasting and renting this product is prohibited by law.

When a CD cannot be played

1. "E-CD01" is displayed.

(1) Check the power to IC1 (LC78645E), the presence of the clock signal (33.8688 MHz) and the status of the RESET terminal (pin 66 on IC1).
(2) Does the pickup move to the PICKUP-IN Switch (SW4) position?

If (1) and (2) are OK, check the system microcomputer (especially the communication line with the DSP).

2. Pressing the CD operation key is accepted, but playback does not occur.

(1) Focus-HF system check
(2) Tracking system check
(3) Spin system check
(4) PLL system check
(5) Others

(1) Focus-HF system check

Although a CD is inserted and the cover is closed, "NO DISC" is displayed.

Press the OPEN/CLOSE switch (SW1) without inserting a disc, and try starting the playback operation.

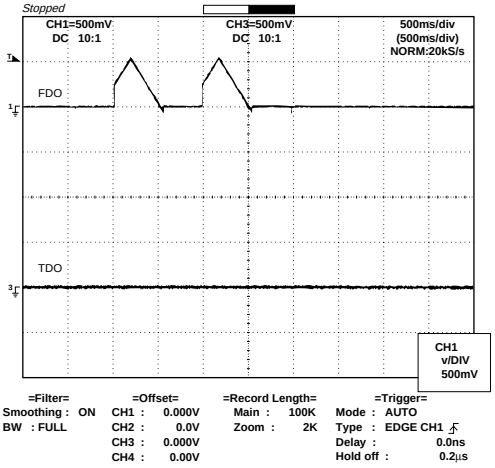


Figure 40-1

1. Does the pickup move to the PICKUP-IN Switch (SW4) position ?
   - No → Sled motor (M2)
   - Yes ↓
2. Does the focus (lens) move up and down ? (Waveform drawing Figure 40-1).
   - No → Check the focus peripheral circuit.
   - Yes ↓
3. Is the laser lit ?
   - No → Check the laser diode driver Q1 peripheral circuit.
   - Yes ↓
4. Is the turntable rotating ?
   - No → Spindle motor (M1).

When a disc is loaded, start playback operation.

1. Is focus servo activated ? (Waveform drawing Figure 40-2)
   - No → Pins 7~12, 79 and 80 on IC1 Check the laser diode driver Q1 peripheral circuit.
   - Yes ↓
2. Does DRF change from "L" to "H" ?
   - No → Is the disc rotating ?
     - No → Check the spin system.
     - Yes → If the disc is spinning and a HF waveform is generated, DRF will go H.
   - Yes ↓
3. Is the HF waveform normal ? (Waveform drawing Figure 40-3)
   - No → If the level is not normal.

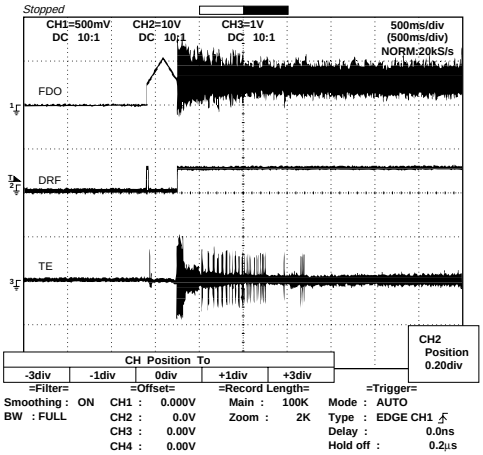


Figure 40-2

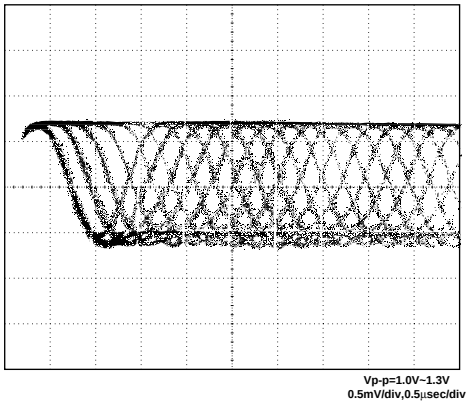


Figure 40-3

(2) Tracking system check

Check the TE waveform at pin 15 on IC1.

If the waveform shown in Figure 41-1 appears and soon after NO DISC appears. ?

Yes → The tracking servo is not activated.
Check the peripheral circuits at pins 14, 15 and 20 on IC1, and CNS1A/B.

No ↓

"Initialization" is possible, but play is not possible. ?

Yes → A normal jump operation cannot be completed or the beginning of the track cannot be found.
Check the around pin 20 on IC1.

No ↓

"Initialization" is not possible. → Data cannot be read. Check the VCO-PLL system.

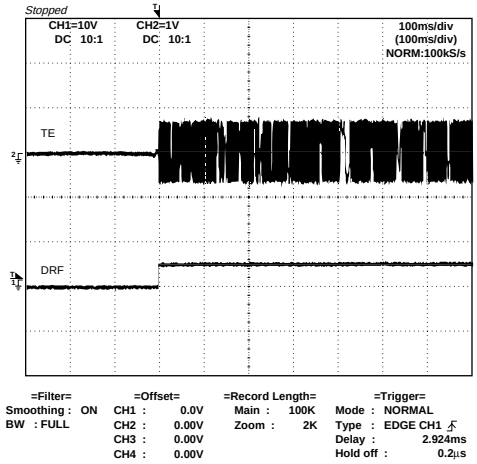


Figure 41-1

(3) Spin system check

Press the OPEN/CLOSE switch without inserting a disc, and then try starting the play operation.

1. The turntable rotates a little. ? (Waveform drawing Figure 41-2)

Yes → The spin driver circuit is OK.

No ↓

2. The turntable doesn't rotate. → Check around pin 22 on IC1, pins 15 and 16 on IC3, and CNS3A/B.

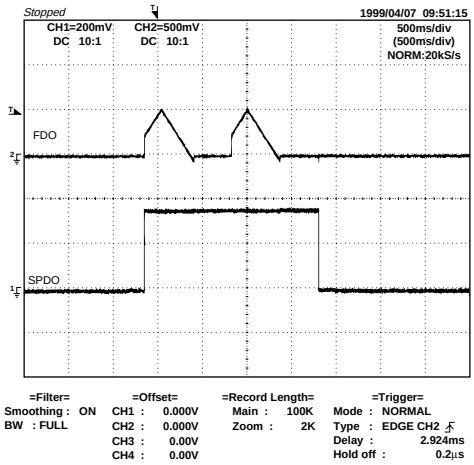


Figure 41-2

(4) PLL system check

When a disc is loaded, start play operation.

↓

The HF waveform is normal, but the TOC data cannot be read.

↓

Check the PDO waveform. (Figure 42-1)

↓

Check around pins 73~78 on IC1.

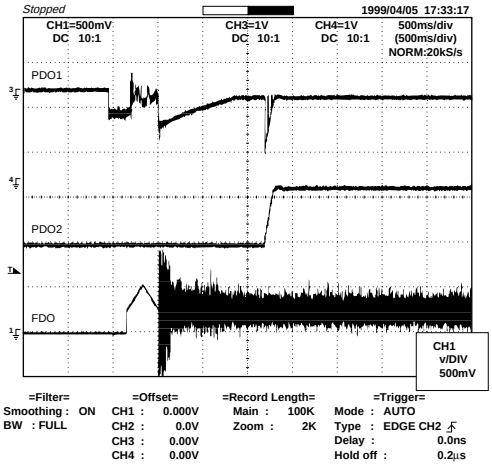


Figure 42-1

(5) Others

The HF waveform is normal and the time is displayed normally, but no sound is produced. Or the sound has dropouts.

Is pin 52 (C2F) on IC1 "L" ?

No → There are too many error flags on a damaged disc which makes error correction impossible.

↓

Check again using a known good disc.

Yes

↓

1. When playing at normal speed
   Check the peripheral circuit at pin 39 (DOUT) on IC1 and the waveform (Figure 42-2).

↓

If OK, Check the unit.

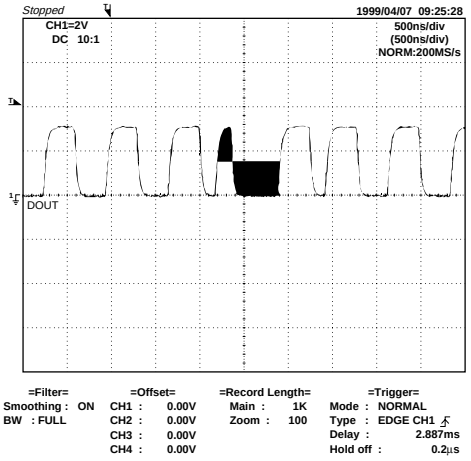


Figure 42-2

FUNCTION TABLE OF IC

IC1 VHiLC78645E-1: CD Servo (LC78645E) (1/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
1	SLC0	Output	–	For slice level control.	Control output.
2	SLCIST	Input	–		Resistor connection terminal for SLCO output current setting.
3	EFMIN	Input	–		RF signal input terminal.
4	RF	Output	–	RF signal monitor terminal.	
5	RFVDD	Input	–	RF power terminal.	
6	RFVSS	–	–	RF earth terminal. To be connected to 0V.	
7	FIN1	Input	–	A+C signal input terminal.	
8	FIN2	Input	–	B+D signal input terminal.	
9	TIN1	Input	–	E signal input terminal.	
10	TIN2	Input	–	F signal input terminal.	
11	VREF	Output	RFVDD/2	VREF voltage output terminal.	
12	REFI	Input	–	Reference supply setting terminal.	
13*	FE	Output	ZHI	FE signal monitor terminal.	
14	TEC	Output	–	LPF capacitor connection terminal for TE signal.	
15*	TE	Output	ZHI	TE signal monitor terminal.	
16*	RFMON	Output	ZHI	RF internal signal monitor terminal.	
17	JITTC	–	–	Capacitor connection terminal for jitter detection.	
18	ADAVDD	Input	–	Power terminal for servo A/D, D/A.	
19	ADAVSS	–	–	Earth terminal for serve A/D, D/A. To be connected to 0V.	
20	TD0	Output	ADAVDD/2	Output terminal for tracking control. D/A output.	
21	FD0	Output	ADAVDD/2	Output terminal for focus control. D/A output.	
22	SPD0	Output	ADAVDD/2	Output terminal for spindle control. D/A output.	
23	SLD0	Output	ADAVDD/2	Output terminal for sled control. D/A output.	
24*	GPDAC	Output	ADAVDD/2	Servo D/A general-purpose output terminal.	
25	CONT4	Input/Output	Input Mode	General-purpose I/O terminal 4.	Controlled by commands from the microcomputer. When not used, set them as input terminals and connect to 0V, or set them as output terminals and leave open.
26	CONT5	Input/Output	Input Mode	General-purpose I/O terminal 5.	
27*	SBCK/CONT6	Input/Output	Input Mode	General-purpose I/O terminal 6 or Subcode reading clock input terminal.	
28	SBCK/FG	Input	–	Subcode reading clock input terminal/FG signal input terminal/external emphasis setting terminal. Terminal functions are set by commands. When not used, connect to 0V.	
29*	DEFECT	Output	L	Defect terminal.	
30*	V/*P	Output	H	Auto switching monitor output terminal for rough servo phase control. “H”: rough servo, “L”: phase servo.	
31*	FSEQ	Output	L	Sync signal detection output terminal. The status changes to “H” when the sync signal detected in EFM and the sync signal of internal generation are identified.	
32*	MONI1	Output	L	Internal signal monitor terminal 1.	
33*	MONI2	Output	L	Internal signal monitor terminal 2.	
34*	MONI3	Output	L	Internal signal monitor terminal 3.	
35*	MONI4	Output	L	Internal signal monitor terminal 4.	
36*	MONI5	Output	L	Internal signal monitor terminal 5.	
37	VSS	–	–	Digital system earth terminal. To be connected to 0V.	
38	VDD	Input	–	Digital system power terminal.	
39	DOUT	Output	L	Digital OUT output terminal. (EIAJ format)	
40	TEST	Input	L	Input terminal for test. To be connected to 0V.	
41	LVDD	Input	–	Left channel D/A converter	Power supply for Left channel.
42	LCH0	Output	LVDD/2		Left channel output.
43	LVSS	–	–		GND for Left channel. Must be connected to 0V.

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

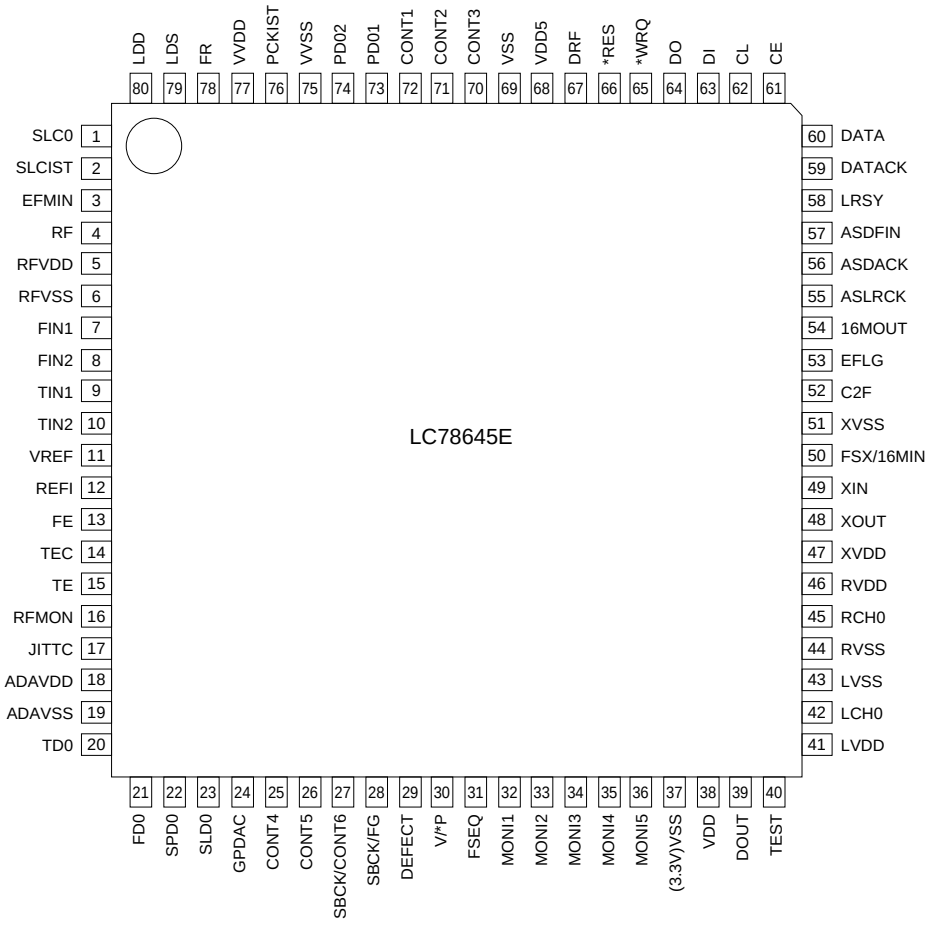
IC1 VHiLC78645E-1: CD Servo (LC78645E) (2/2)

Pin No.	Terminal Name	Input/Output	Setting in Reset	Function	
44	RVSS	–	–	Right channel D/A converter	GND for Right channel. Must be connected to 0V.
45	RCHO	Output	LVDD /2		Right channel output.
46	RVDD	Input	–		Power supply for Right channel.
47	XVDD	–	–	Crystal Oscillator	Power supply for crystal oscillator.
48	XOUT	Output	–		Connected for the 33.8688MHz crystal oscillator cement.
49	XIN	Input	–		
50	FSX/16MIN	Input/Output	Input	7.35kHz Synchronization signal monitor port. or Clock input port for Digital filter & D/A	
51	XVSS	–	–	Crystal Oscillator	GND for crystal oscillator. Must be connected to 0V.
52*	C2F	Output	H	C2 FLAG monitor port.	
53*	EFLG	Output	L	C1, C2 error corrected monitor port.	
54*	16MOUT	Output	Clock	16.9344MHz output port.	
55	ASLRCK	Input	–	Anti-shock	Word clock input port. (If this port does not use, must be connect to 0V.)
56	ASDACK	Input	–		Bit clock input port. (If this port does not use, must be connect to 0V.)
57	ASDFIN	Input	–		Left/Right channel data input port. (If this port does not use, must be connect to 0V.)
58*	LRSY	Output	L	Digital data	Word clock output port.
59*	DATACK	Output	L		Bit clock output port.
60*	DATA	Output	L		Left/Right channel data output port.
61	CE	Input	–	Microcomputer Interface	Chip enable signal input port.
62	CL	Input	–		Data transfer clock input port.
63	DI	Input	–		Data input port.
64	DO	Output	(H)		Data output port. (N-ch. open drain output.)
65	*WRQ	Output	H		Interruption signal output.
66	*RES	Input	–	Chip reset signal input port. This port must be set LOW after first applied power on.	
67	DRF	Output	L	Focus detection output port.	
68	VDD5	Input	—	Power supply for Microprocessor.	
69	VSS	–	–	GND for digital circuit. Must be connected to 0V.	
70	CONT3	Input/Output	Input	General purpose port 1.	Controlled with serial data command from micro-computer. When not used, General purpose input/ output terminal 7. set it as the input terminal and open it by connecting to 0V, or set it as the output terminal and open it.
71	CONT2	Input/Output	Input	General purpose port 2.	
72*	CONT1	Input/Output	Input	General purpose port 3.	
73	PDO1	Output	—	PLL	Internal VCO control phase comparator output port 1.
74	PDO2	Output	Input		Internal VCO control phase comparator output port 2.
75	VVSS	—	—		GND for internal VCO.Must be connected to 0V.
76	PCKIST	Input	—		PDO output current adjustment resistor connection port.
77	VVDD	Input	—		Power supply for internal VCO.
78	FR	Input	—		VCO frequency range adjustment port.
79	LDS	Input	—	LASER power detected signal input port.	
80	LDD	Output	—	LASER power control signal output port.	

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

Be sure to supply the same potential to each power terminal. (VVDD,ADAVDD,VDD,LVDD,RVDD,XVDD)
Terminal witch is controlled by the power terminal (VDD5V) for a microcomputer interface :
CE (61pin), CL (62pin), DI (63pin), DO (64pin), WRQ (65pin), RES 66pin), DRF (67pin)

IC1 VHiLC78645E-1: CD Servo (LC78645E)



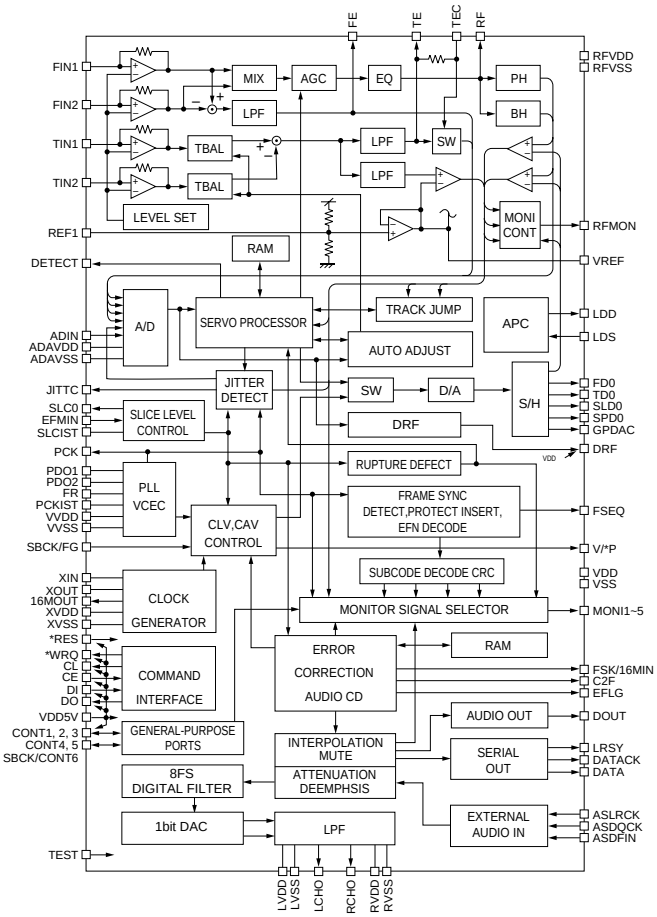


Figure 45 BLOCK DIAGRAM OF IC

IC701 RH-iX0399AWZZ: System Microcomputer (IX0399AW) (1/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
1	VDD	VDD	Input	(+) POWER SUPPLY
2	P37	-20d BATT	Output	-20dB ATTENUATOR
3	P36	NO USE	Output	GND
4	P35	T_BIAS	Output	TAPE RECORD BIAS
5	P34	T_T1/T2	Output	TAPE T1/T2 CHANGE
6	P33	REC/PLAY	Output	TAPE REC/PLAY CHANGE
7	P32	RES OUT	Output	CD DSP RESET&MPEG MICROCOMPUTER RESET
8	P31	DRF	Input	CD RF LEVEL DETECTION
9	P30	WRQ	Input	CD DSP WRITE REQUEST
10	RESET	RESET	Input	RESET
11	X2	X2	Output	MAIN CLOCK
12	X1	X1	Input	MAIN CLOCK
13	VPP/IC	VPP/IC	—	GND
14*	XT2	XT2	—	OPEN
15	P04	SPN	Input	TUNER SPAN CHANGE
16	VDD	VDD	—	(+) POWER SUPPLY
17	P27	CD CLK	Output	CD DSP CLOCK
18	P26	CD DI	Output	CD DSP COMMAND
19	P25	CD DO	Input	CD DSP CODE Q OUT/
20	P24	CD CE	Output	CD DSP CE OUTPUT
21	P23	CE	Output	CE OUTPUT
22	P22	CLK	Output	CLOCK OUTPUT
23	P21	DI	Output	DATA OUTPUT
24	P20	DO	Input	DATA INPUT
25	AVSS	AVSS	—	ANALOG GROUND
26	ANI7	O/C SW	Input	CD OPEN/CLOSE SWITCH
		DISC NO SW	Input	CD DISC NUMBER SWITCH
27	ANI6	TUNER SM	Input	TUNER SIGNAL METER INPUT
		DSA ACK	Input/Output	DSA ACR
28	ANI5	SPEANA2	Input	SPEANA DATA INPUT 16 kHz
29	ANI4	SPEANA1	Input	SPEANA DATA INPUT 1 kHz
30	ANI3	SPEANA0	Input	SPEANA DATA INPUT 63 kHz
31-33	ANI2-ANI0	KEY 2-KEY 0	Input	KEY INPUT
34	AVDD	AVDD	Input	ANALOG VDD
35	AVREF	AVREF	Input	ANALOG REF VOLTAGE
36	INTP3	P-IN	Input	POWER FAILURE DETECT
37	P02	JOG 1	Input	JOG VOLUME INPUT 1
38	P01	JOG 0	Input	JOG VOLUME INPUT 0
39	INTP0	REMOCON	Input	REMOCON INPUT
40	VSS	VSS	—	GROUND VOLTAGE
41	P74	SMUTE	Output	SYSTEM MUTE CONTROL
42	P73	T_SOL B	Output	TAPE 2 SOLENOID CONTROL
43	P72	T_SOL A	Output	TAPE 1 SOLENOID CONTROL
44	P71	T_MOTOR	Output	TAPE MOTOR CONTROL
45	P70	TIMER LED	Output	TIMER LED CONTROL
46	VDD	VDD	Input	(+) POWER SUPPLY
47*	P127	AC RLY_CONT	Output	AC RELAY CONTROL
48	P126	SP RLY	Output	SPEAKER OUTPUT RELAY CONTROL
49	P125	SP DET	Input	SPEAKER OUTPUT DETECTION
50	P124	T1 RUN	Input	TAPE 1 RUN PULSE INPUT
51	P123	T2 RUN	Input	TAPE 2 RUN PULSE INPUT
52	P122	CD CLAMP SW	Input	CD CHANGER CLAMP SWITCH

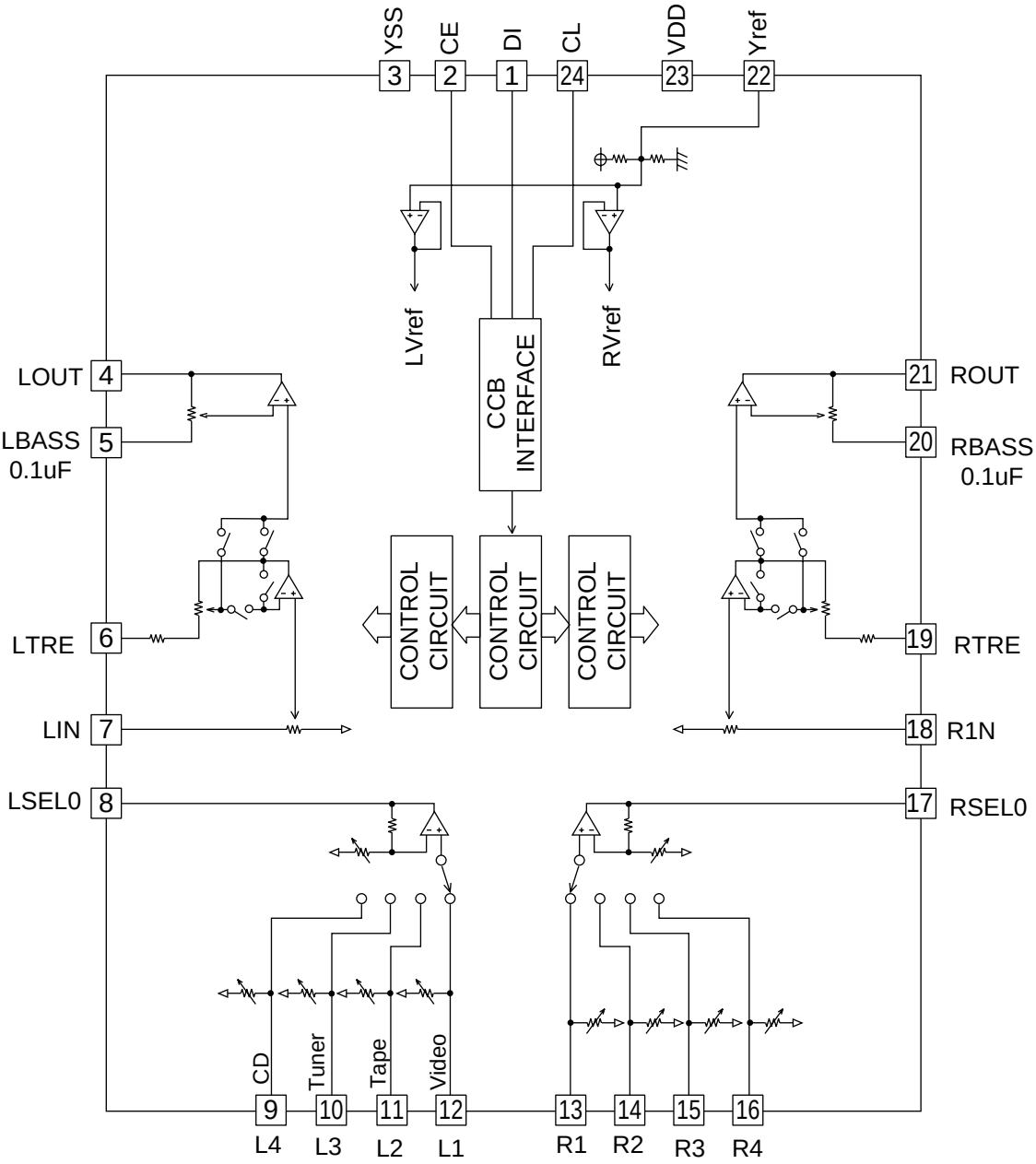
In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC701 RH-iX0399AWZZ: System Microcomputer (IX0399AW) (2/2)

Pin No.	Port Name	Terminal Name	Input/Output	Function
53	P121	NO USE	Input	GND
54	P120	PLAY SW_B	Input	PLAY SWITCH FOR T2
55	P117	FPA	Input	TAPE 2 A-SIDE FULL PROOF
56	P116	FPB	Input	TAPE 2 B-SIDE FULL PROOF
57	P115	MIC SW	Input	MIC SWITCH
58*	P114	LCK0	Output	LED DRIVER LCK
59	P113	DISTOUT	Output	DESTINATION OUTPUT
60	FIP39	NO USE	Output	GND
61*	FIP38	KARAOKE LATCH	Output	KARAOKE LATCH (WHEN NOT USED. CONNECT TO 0V)
62	FIP37	NO USE	Output	GND
		MPEG_POW	Output	MPEG POWER CONTROL
63	FIP36	NO USE	Output	GND
		RDS RST/ESS_ACK	Output	RDS FAN RESET
64	FIP35	NO USE	Input	GND
		RDS RDDA/ESS_STB	Input	RDS TRANSMIT DATA INPUT/DSA STROBE
65	FIP34	NO USE	Output	GND
		RDS RDCL/ESS_DI	Output	RDS CLOCK /DSA DATA OUTPUT
66	FIP33	NO USE	Input	GND
		RDS READY/ESS_DO	Input	RDS READY/DSA DATA INPUT
67	P103	DIST3	Input	DESTINATION INPUT
	FIP32	P22	Output	FL DISPLAY DRIVER
68	P102	DIST2	Input	DESTINATION INPUT
	FIP31	P21	Output	FL DISPLAY DRIVER
69	P101	DIST1	Input	DESTINATION INPUT
	FIP30	P20	Output	FL DISPLAY DRIVER
70	P100	DIST0	Input	DESTINATION INPUT
	FIP29	P19	Output	FL DISPLAY DRIVER
71-78	FIP28-FIP21	P14-P7	Output	FL DISPLAY DRIVER
79	VLOAD	VLOAD	Input	FL DRIVER (-) POWER SUPP. -30V
80-89	FIP20-FIP11	P10-P1	Output	FL DISPLAY DRIVER
90-100	FIP10-FIP0	G11-G1	Output	FL DISPLAY DRIVER

In this unit, the terminal with asterisk mark (*) is (open) terminal which is not connected to the outside.

IC601 VHiLC75341/-1: Audio Processor (LC75341)



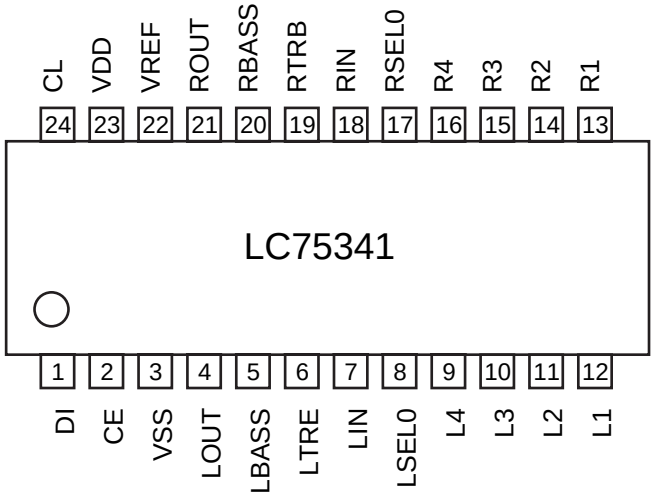
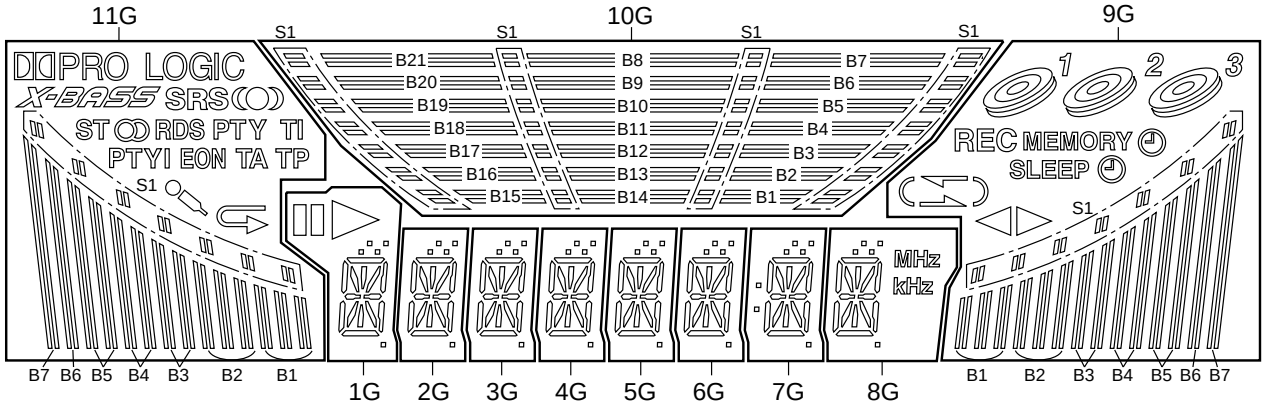
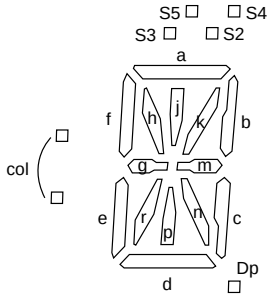


Figure 48 BLOCK DIAGRAM OF IC

FL DISPLAY

FL701 VVKBJ11LM02T1: FL Display





	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	S1	S1	S1	Dp	Dp	Dp	Dp	Dp	Dp	Dp	Dp
P2	B1	B1	B1	d	d	d	d	d	d	d	d
P3	B2	B2	B2	c	c	c	c	c	c	c	c
P4	B3	B3	B3	n	n	n	n	n	n	n	n
P5	B4	B4	B4	p	p	p	p	p	p	p	p
P6	B5	B5	B5	r	r	r	r	r	r	r	r
P7	B6	B6	B6	e	e	e	e	e	e	e	e
P8	B7	B7	B7	m	m	m	m	m	m	m	m
P9		B8	1	g	g	g	g	g	g	g	g
P10	X-BASS	B9	2		col						
P11		B10	3	b	b	b	b	b	b	b	b
P12	ST	B11	REC	k	k	k	k	k	k	k	k
P13		B12	MEMORY	j	j	j	j	j	j	j	j
P14	RDS	B13	(Hiper)	h	h	h	h	h	h	h	h
P15	PTY	B14	(Lower)	f	f	f	f	f	f	f	f
P16	TI	B15	SLEEP	a	a	a	a	a	a	a	a
P17	TP	B16		S2	S2	S2	S2	S2	S2	S2	S2
P18	TA	B17		S3	S3	S3	S3	S3	S3	S3	S3
P19	PTYI	B18		S4	S4	S4	S4	S4	S4	S4	S4
P20	EON	B19		S5	S5	S5	S5	S5	S5	S5	S5
P21		B20		MHz							
P22		B21		kHz							

— MEMO —

SHARP PARTS GUIDE

MINI COMPONENT SYSTEM

MODEL CD-BA250

CD-BA250 Mini Component System consisting of CD-BA250 (main unit) and CP-BA250 (speaker system).

MINI COMPONENT SYSTEM

MODEL CD-BA2600

CD-BA2600 Mini Component System consisting of CD-BA2600 (main unit) and CP-BA2600 (speaker system).

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following information.

1. MODEL NUMBER
2. REF. No.
3. PART NO.
4. DESCRIPTION

★ MARK: SPARE PARTS-DELIVERY SECTION

For U.S.A. only

Contact your nearest SHARP Parts Distributor to order.

For location of SHARP Parts Distributor,
Please call Toll-Free;
1-800-BE-SHARP

Explanation of capacitors/resistors parts codes

Capacitors

VCC ..... Ceramic type
VCK..... Ceramic type
VCT..... Semiconductor type
VC • • MF ..... Cylindrical type (without lead wire)
VC • • MN..... Cylindrical type (without lead wire)
VC • • TV..... Square type (without lead wire)
VC • • TQ ..... Square type (without lead wire)
VC • • CY ..... Square type (without lead wire)
VC • • CZ ..... Square type (without lead wire)
VC • • • • • • • • • J .. The 13th character represents capacity difference.
("J" ±5%, "K" ±10%, "M" ±20%, "N" ±30%,
"C" ±0.25 pF, "D" ±0.5 pF, "Z" +80-20%.)

If there are no indications for the electrolytic capacitors, error is ±20%.

Resistors

VRD ..... Carbon-film type
VRS..... Carbon-film type
VRN ..... Metal-film type
VR • • MF ..... Cylindrical type (without lead wire)
VR • • MN..... Cylindrical type (without lead wire)
VR • • TV..... Square type (without lead wire)
VR • • TQ ..... Square type (without lead wire)
VR • • CY ..... Square type (without lead wire)
VR • • CZ ..... Square type (without lead wire)
VR • • • • • • • • • J .. The 13th character represents error.
("J" ±5%, "F" ±1%, "D" ±0.5%.)

If there are no indications for other parts, the resistors are ±5% carbon-film type.

NOTE:
Parts marked with "⚠" are important for maintaining the safety of the set.
Be sure to replace parts with specified ones for maintaining the safety and performance of the set.

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

CD-BA250/CD-BA2600

INTEGRATED CIRCUITS

IC1	VHILC78645E-1	J	AY	CD Servo,LC78645E
IC2	VHIM63001FP-1	J	AX	Focus/Tracking/Spin/Sled Driver,M63001FP
IC101	VHIAN7345K/-1	J	AM	Playback and Record/Playback Amp.,AN7345K
IC301	VHITA7358AP-1	J	AG	FM Front End,TA7358AP
IC302	VHILC72131/-1	J	AP	PLL (Tuner),LC72131
IC303	VHILA1832S/-1	J	AN	FM IF Det./FM Mpx./AM IF, LA1832S
IC561,562	VHIKIA4558P-1	J	AC	Ope Amp.,KIA4558P
IC601	VHILC75341/-1	J	AM	Audio Processor,LC75341
IC701	RH-IX0399AWZZ	J	AW	System Microcomputer, IX0399AW
IC901	VHISTK4029S-1	J	BA	Power Amp.,STK4029S
IC902	VSKTC2026//-1	J	AF	Silicon,NPN,KTC2026
IC903	VHIKIA7810AP1	J	AF	Voltage Regulator,KIA7810AP
IC904	VHIKIA7805AP1	J	AF	Constant Voltage Regulator, KIA7805AP

TRANSISTORS

Q1	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q2	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q3	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q101~104	VS2SC1845F/-1	J	AC	Silicon,NPN,2SC1845 F
Q105~108	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q109	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q110	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q111	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q112	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q113,114	VSKRC104M//-1	J	AC	Digital,NPN,KRC104 M
Q302	VSKTC3194Y/-1	J	AD	Silicon,NPN,KTC3194 Y
Q360	VSKTA1266GR-1	J	AB	Silicon,PNP,KTA1266 GR
Q601,602	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q701~703	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q706	VSKTA1273Y/-1	J	AE	Silicon,PNP,KTA1273 Y
Q707,708	VSKTA1271Y/-1	J	AC	Silicon,PNP,KTA1271 Y
Q709	VSKRC102M//-1	J	AC	Digital,NPN,KRC102 M
Q901	VSKTA1274Y/-1	J	AE	Silicon,PNP,KTA1274 Y
Q902~905	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR
Q906	VSKTC3203Y/-1	J	AC	Silicon,NPN,KTC3203 Y
Q907	VSKRC107M//-1	J	AC	Digital,NPN,KRC107 M
Q908	VSKRA107M//-1	J	AE	Digital,PNP,KRA107 M
Q914	VSKTC3199GR-1	J	AB	Silicon,NPN,KTC3199 GR

DIODES

D1,2	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D301,302	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D305	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D561~563	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D690,691	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D703	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D709~716	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
D901	VHDTS6B04GM-1	J	AP	Silicon,TS6B04GM
D902~908	VHDDS1N404S-1	J	AB	Silicon,DS1N404S
D911~916	VHDDS1SS133-1	J	AB	Silicon,DS1SS133
LED701	VHPSLR342VCJ1	J	AC	LED,Red,SLR342VCJ1
ZD1	VHEDZ3R3BSB-1	J	AB	Zener,3.3V,DZ3.3BSB
ZD2	VHEDZ3R9BSB-1	J	AC	Zener,3.9V,DZ3.9BSB
ZD351	VHEDZ5R1BSB-1	J	AC	Zener,5.1V,DZ5.1BSB
ZD561	VHEDZ6R2BSB-1	J	AC	Zener,6.2V,DZ6.2BSB
ZD901	VHEDZ330BSD-1	J	AC	Zener,33V,DZ330BSB
ZD902	VHEDZ110BSB-1	J	AB	Zener,DZ110BSB
ZD903	VHEDZ6R2BSA-1	J	AB	Zener,6.2V,DZ6.2BSA
ZD904	VHEDZ130BSB-1	J	AB	Zener,DZ130BSB
ZD905	VHEDZ2R4BSB-1	J	AB	Zener,2.4V,DZ2.4BSB

FILTERS

BF301	RFILR0008AWZZ	J	AE	Band Pass Filter
CF303	RFILF0124AFZZ	J	AD	FM IF,10.7 MHz
CF351	RFILF0003AWZZ	J	AK	FM IF
CF352	RFILA0009AWZZ	J	AE	AM IF

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION

TRANSFORMERS

⚠	PT801	RTRNP0350AWZZ	J	BE	Power
	T301	RCILB0065AWZZ	J	AC	FM OSC.
	T302	RCILI0017AWZZ	J	AB	FM IF
	T303	RCILA0052AWZZ	J	AE	AM Tracking
	T306	RCILB0067AWZZ	J	AD	AM OSC.
	T351	RCILI0019AWZZ	J	AD	AM IF

COILS

L1	VP-XHR82K0000	J	AC	0.82 µH
L103	VP-MK331K0000	J	AB	330 µH,Choke
L312	RCILR0056AWZZ	J	AB	FM RF
L351	VP-DH101K0000	J	AB	100 µH,Choke
L701	VP-DH101K0000	J	AB	100 µH,Choke
L920,921	RCILZ0137AFZZ	J	AA	0.29 µH

VARIABLE CAPACITORS

VD301	VHCSVC348S/-1	J	AK	Variable Capacitance,SVC348S
VD302,303	VHCSVC211C/-1	J	AG	Variable Capacitance,SVC211C

VIBRATORS

X351	92LCRSTL1425A	J	AF	Crystal,456 kHz
X352	RCRSP0015AWZZ	J	AF	Crystal,4.5 MHz
XL1	RCRM-0041AWZZ	J	AF	Ceramic,33.8688 MHz
XL700	RCRSP0003AWZZ	J	AH	Crystal,4.194304 MHz

CAPACITORS

C1	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C2	VCTYMN1CY103N	J	AA	0.01 µF,16V
C3	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C4	VCKYMN1HB102K	J	AA	0.001 µF,50V
C5	VCQYKA1HM473J	J	AB	0.047 µF,50V,Mylar
C6	VCTYPA1CX104K	J	AB	0.1 µF,16V
C7	VCKYMN1HB101K	J	AA	100 pF,50V
C8	VCTYMN1CX472K	J	AA	0.0047 µF,16V
C9	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C10	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C11	VCEAZA1HW224M	J	AB	0.22 µF,50V,Electrolytic
C12	VCCSPA1HL101J	J	AA	100 pF,50V
C13	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C14	RC-EZY107AF1A	J	AB	100 µF,10V,Electrolytic
C16	VCEAEA0JW337M	J	AD	330 µF,6.3V,Electrolytic
C18	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C23,24	RC-EZY106AF1H	J	AB	10 µF,50V,Electrolytic
C25,26	VCTYMN1CX152K	J	AA	0.0015 µF,16V
C27	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C28	VCKYMN1HB101K	J	AA	100 pF,50V
C30	VCKYMN1HB101K	J	AA	100 pF,50V
C32~34	VCKYMN1HB101K	J	AA	100 pF,50V
C35	VCQYKA1HM473J	J	AB	0.047 µF,50V,Mylar
C36	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C37	VCTYPA1CX104K	J	AB	0.1 µF,16V
C38	VCTYMN1CY103N	J	AA	0.01 µF,16V
C39	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C40	VCEAZA0JW227M	J	AC	220 µF,6.3V,Electrolytic
C41	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C42	VCTYMN1CY103N	J	AA	0.01 µF,16V
C44	VCKYMN1HB102K	J	AA	0.001 µF,50V
C48	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C49	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C50	VCCCPA1HH220J	J	AA	22 pF (CH),50V
C51	VCTYBT1EF223Z	J	AA	0.022 µF,25V
C101,102	VCKYMN1HB561K	J	AA	560 pF,50V
C103,104	VCKYMN1HB181K	J	AA	180 pF,50V
C105,106	VCKYMN1HB561K	J	AA	560 pF,50V
C107~110	VCKYMN1HB331K	J	AA	330 pF,50V
C111,112	VCEAZA1EW107M	J	AB	100 µF,25V,Electrolytic
C113,114	VCTYPA1EX333K	J	AA	0.033 µF,25V
C115,116	VCKYMN1HB561K	J	AA	560 pF,50V
C117,118	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C119	VCKYPA1HB222K	J	AA	0.0022 µF,50V
C120	VCTYMN1CX222K	J	AA	0.0022 µF,16V
C121	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C122	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C123,124	VCKYMN1HB271K	J	AA	270 pF,50V

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
C125,126	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C127,128	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C129,130	VCTYMN1CX332K	J	AA	0.0033 µF,16V
C131,132	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C133	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C134	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C135	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C136	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C137	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C138	VCQPKA2AA822J	J	AA	0.0082 µF,100V,Polypropylene
C139	VCQYKA1HM393K	J	AB	0.039 µF,50V,Mylar
C140	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C141	VCEAZA1CW107M	J	AC	100 µF,16V,Electrolytic
C150	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C301	VCTYMN1CY103N	J	AA	0.01 µF,16V
C303	VCCCMN1HH100J	J	AA	10 pF (CH),50V
C304	VCTYMN1CY103N	J	AA	0.01 µF,16V
C305	VCCCMN1HH4R7C	J	AA	4.7 pF (CH),50V
C306	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C307	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C308	VCCCMN1HH4R7C	J	AA	4.7 pF (CH),50V
C309	VCKYMN1HB102K	J	AA	0.001 µF,50V
C310	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C311	VCCSMN1HL180J	J	AA	18 pF,50V
C312	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C313	VCCSMN1HL220J	J	AA	22 pF,50V
C314,315	VCTYMN1CX472K	J	AA	0.0047 µF,16V
C316	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C317	VCKYMN1HB102K	J	AA	0.001 µF,50V
C318	VCKYMN1HB101K	J	AA	100 pF,50V
C323	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C324	VCCUMN1HJ3R9K	J	AA	3.9 pF (UJ),50V
C330	VCCSMN1HL150J	J	AA	15 pF,50V
C331	VCKZPA1HF473Z	J	AA	0.047 µF,50V
C332	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C334	VCCSMN1HL220J	J	AA	22 pF,50V
C335	VCKYMN1HB561K	J	AA	560 pF,50V
C338	VCKYMN1HB102K	J	AA	0.001 µF,50V
C340	VCKYMN1HB102K	J	AA	0.001 µF,50V
C342	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C350	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C352	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C353,354	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C355	VCCSMN1HL220J	J	AA	22 pF,50V
C356	VCKYMN1HB102K	J	AA	0.001 µF,50V
C357	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C358	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C361	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C362	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C363	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C364	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C365	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C366	VCKYMN1HB102K	J	AA	0.001 µF,50V
C367,368	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C369	VCCSMN1HL270J	J	AA	27 pF,50V
C370~372	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C373,374	VCTYPA1CX153K	J	AA	0.015 µF,16V
C380	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C381	VCCCMN1HH120J	J	AA	12 pF (CH),50V
C382	VCCCMN1HH150J	J	AA	15 pF (CH),50V
C384	VCKYMN1HB102K	J	AA	0.001 µF,50V
C385	VCTYMN1CY103N	J	AA	0.01 µF,16V
C386	VCKYMN1HB331K	J	AA	330 pF,50V
C387	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C388	VCKYMN1HB102K	J	AA	0.001 µF,50V
C389	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C391	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C392	VCKYMN1HB102K	J	AA	0.001 µF,50V
C393	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C394	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C395	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C396	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C397	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C398	VCEAZA1AW107M	J	AB	100 µF,10V,Electrolytic
C399	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C561	VCKYPA1HB271K	J	AA	270 pF,50V
C562	VCKYMN1HB271K	J	AA	270 pF,50V
C563	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C564,565	VCTYMN1CX272K	J	AA	0.0027 µF,16V
C566	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C567,568	VCTYMN1CX682K	J	AA	0.0068 µF,16V
C569	VCEAZA1HW225M	J	AB	2.2 µF,50V,Electrolytic
C570~572	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C573	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C601	VCEAZA1CW227M	J	AC	220 µF,16V,Electrolytic
C603	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C605,606	VCFYDA1HA154J	J	AB	0.15 µF,50V,Thin Film
C607,608	VCFYHA1HA104J	J	AB	0.1 µF,50V,Thin Film
C609,610	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C611,612	VCTYMN1CX272K	J	AA	0.0027 µF,16V
C613,614	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C615,616	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C617~624	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C625,626	VCTYMN1CX562K	J	AA	0.0056 µF,16V
C635,636	VCKYMN1HB102K	J	AA	0.001 µF,50V
C639	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C690,691	VCKYMN1HB391K	J	AA	390 pF,50V
C693	VCKYMN1HB102K	J	AA	0.001 µF,50V
C701	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C702	VCEAZA1AW227M	J	AC	220 µF,10V,Electrolytic
C703	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C704	VCCSMN1HL150J	J	AA	15 pF,50V
C705	VCCSMN1HL180J	J	AA	18 pF,50V
C706	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C707	VCEAZA1HW105M	J	AB	1 µF,50V,Electrolytic
C712	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C714	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C715	VCTYMN1CY103N	J	AA	0.01 µF,16V
C716	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C717	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C734,735	VCCSPA1HL221J	J	AA	220 pF,50V
C901,902	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C903,904	RC-EZ0063AWZZ	J	AM	2200 µF,63V,Electrolytic
C905,906	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C907	VCEAZW1VW228M	J	AH	2200 µF,35V,Electrolytic
C908,909	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C910	VCEAZA1HW227M	J	AC	220 µF,50V,Electrolytic
C911,912	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C913	VCEAZA1VW107M	J	AC	100 µF,35V,Electrolytic
C915	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C916	VCEAZA1HW226M	J	AB	22 µF,50V,Electrolytic
C918	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C920	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C921	VCQYKA1HM104K	J	AB	0.1 µF,50V,Mylar
C923	VCEAZA1EW476M	J	AB	47 µF,25V,Electrolytic
C930,931	VCEAZA1HW224M	J	AB	0.22 µF,50V,Electrolytic
C932,933	VCKYMN1HB102K	J	AA	0.001 µF,50V
C934,935	VCEAZA1HW475M	J	AB	4.7 µF,50V,Electrolytic
C936,937	VCCSMN1HL150J	J	AA	15 pF,50V
C938,939	VCKYMN1HB151K	J	AA	150 pF,50V
C940,941	VCEAZA1HW107M	J	AC	100 µF,50V,Electrolytic
C942	VCFYDA1HA224J	J	AB	0.22 µF,50V,Polyester
C945,946	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C947	VCTYMN1EF223Z	J	AA	0.022 µF,25V
C948	VCKZPA1HF223Z	J	AA	0.022 µF,50V
C949	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C952,953	VCQYKA1HM473K	J	AB	0.047 µF,50V,Mylar
C967	VCEAZA1HW476M	J	AB	47 µF,50V,Electrolytic
C968	VCEAZA1HW106M	J	AB	10 µF,50V,Electrolytic
C969	VCEAZA1HW335M	J	AB	3.3 µF,50V,Electrolytic
C970	VCEAZW1CW688M	J	AH	6800 µF,16V,Electrolytic
CT1	VCKZPA1HF103Z	J	AA	0.01 µF,50V

RESISTORS

	VRD-MN2BD000C	J	AA	0 ohm,Jumper,ø1.4×3.5mm,Ivory
R1,2	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R3	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R4,5	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R6	VRD-ST2CD333J	J	AA	33 kohms,1/6W
R7	VRD-ST2CD470J	J	AA	47 ohms,1/6W
R9	VRD-ST2CD3R3J	J	AA	3.3 ohms,1/6W
R10	VRD-ST2CD273J	J	AA	27 kohms,1/6W
R11	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R12	VRD-MN2BD331J	J	AA	330 ohms,1/8W
R13~17	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R18	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R19	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R20	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R22	VRD-ST2CD101J	J	AA	100 ohm,1/6W
R23	VRD-MN2BD221J	J	AA	220 ohms,1/8W
R24,25	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R26,27	VRD-MN2BD103J	J	AA	10 kohm,1/8W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R28,29	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R30	VRD-ST2CD822J	J	AA	8.2 kohms,1/6W
R31~38	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R39,40	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R41	VRD-MN2BD123J	J	AA	12 kohms,1/8W
R42	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R43	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R44	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R45,46	VRD-MN2BD471J	J	AA	470 ohms,1/8W
R47	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R49	VRD-ST2EE1R0J	J	AA	1 ohm,1/4W
R101,102	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R103,104	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R105,106	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R107,108	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R109,110	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R111	VRD-MN2BD153J	J	AA	15 kohms,1/8W
R112	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R113,114	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R115,116	VRD-ST2CD560J	J	AA	56 ohms,1/6W
R117,118	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R119,120	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R121,122	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R123,124	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R125	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R126,127	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R128,129	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R130,131	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R132,133	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R134,135	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R136,137	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R138	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R139	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R140	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R141	VRD-RT2HD472J	J	AA	4.7 kohms,1/2W
R142	VRD-ST2CD820J	J	AA	82 ohms,1/6W
R143	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R144	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R145	VRD-ST2CD4R7J	J	AA	4.7 ohms,1/6W
R146,147	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R148	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R149	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R158	VRD-ST2EE221J	J	AA	220 ohms,1/4W
R302	VRD-MN2BD100J	J	AA	10 ohm,1/8W
R309	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R311	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R313	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R314	VRD-ST2CD220J	J	AA	22 ohms,1/6W
R316	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R322	VRD-MN2BD681J	J	AA	680 ohms,1/8W
R323	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R325	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R327	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R336	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R350	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
R351	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R352	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R353	VRD-MN2BD271J	J	AA	270 ohms,1/8W
R355	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R356	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R357	VRD-ST2CD474J	J	AA	470 kohms,1/6W
R358	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
R359	VRD-MN2BD182J	J	AA	1.8 kohms,1/8W
R360	VRD-MN2BD472J	J	AA	4.7 kohms,1/8W
R361,362	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R363,364	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R365	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R372~374	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R375	VRD-ST2CD471J	J	AA	470 ohms,1/6W
R376	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R377	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R378	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R379	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R380	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R381	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R382	VRD-ST2EE151J	J	AA	150 ohms,1/4W
R383	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R384	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R385	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
R386	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R387	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
R388	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R391,392	VRD-ST2EE271J	J	AA	270 ohms,1/4W
R393	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R395	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R561	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R562	VRD-MN2BD824J	J	AA	820 kohms,1/8W
R563	VRD-ST2EE271J	J	AA	270 ohms,1/4W
R565	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R566	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R567	VRD-MN2BD683J	J	AA	68 kohms,1/8W
R568	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R569	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R570	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R571	VRD-MN2BD394J	J	AA	390 kohms,1/8W
R572	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R573	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R574	VRD-MN2BD105J	J	AA	1 Mohm,1/8W
R575	VRD-MN2BD474J	J	AA	470 kohms,1/8W
R576	VRD-MN2BD225J	J	AA	2.2 Mohms,1/8W
R577	VRD-MN2BD154J	J	AA	150 kohms,1/8W
R578	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R579	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R580	VRD-MN2BD184J	J	AA	180 kohms,1/8W
R601~603	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R604,605	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R606,607	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
R608,609	VRD-MN2BD122J	J	AA	1.2 kohms,1/8W
R610,611	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
R612,613	VRD-MN2BD391J	J	AA	390 ohms,1/8W
R614,615	VRD-MN2BD332J	J	AA	3.3 kohms,1/8W
R618,619	VRD-ST2CD331J	J	AA	330 ohms,1/6W
R621	VRD-MN2BD223J	J	AA	22 kohms,1/8W
R622,623	VRD-MN2BD224J	J	AA	220 kohms,1/8W
R690,691	VRD-MN2BD682J	J	AA	6.8 kohms,1/8W
R692,693	VRD-MN2BD333J	J	AA	33 kohms,1/8W
R702~704	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R705~707	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R708~712	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R713~717	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R718~721	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R724,725	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R726~729	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R731	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R732,733	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R734~736	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R738	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R739,740	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R746~748	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R749~751	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R752	VRD-MN2BD330J	J	AA	33 ohms,1/8W
R756	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R758~760	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R761	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R765	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R766~768	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R770	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R772	VRD-ST2CD103J	J	AA	10 kohm,1/6W
R773	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R774	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R777~779	VRD-MN2BD103J	J	AA	10 kohm,1/8W
R781	VRD-MN2BD473J	J	AA	47 kohms,1/8W
R782	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R783	VRD-MN2BD101J	J	AA	100 ohm,1/8W
R901,902	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R903	VRD-RT2HD332J	J	AA	3.3 kohms,1/2W
R904	VRD-ST2CD222J	J	AA	2.2 kohms,1/6W
R905	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R906	VRD-ST2CD100J	J	AA	10 ohm,1/6W
R907	VRD-ST2CD123J	J	AA	12 kohms,1/6W
R908	VRD-ST2EE561J	J	AA	560 ohms,1/4W
R909	VRD-ST2CD223J	J	AA	22 kohms,1/6W
R930	VRD-ST2CD104J	J	AA	100 kohm,1/6W
R931	VRD-MN2BD104J	J	AA	100 kohm,1/8W
R932,933	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R934	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R935	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R936,937	VRD-MN2BD821J	J	AA	820 ohms,1/8W
R938,939	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R940,941	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R942	VRD-MN2BD223J	J	AA	22 kohms,1/8W
⚠ R943,944	VRG-ST2EC101J	J	AB	100 ohm,1/4W,Fusible
R945~948	VRN-VV3DAR22J	J	AC	0.22 ohms,2W
R949,950	VRN-VV3AAR10J	J	AB	0.1 ohm,1W

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
R951	VRD-MN2BD102J	J	AA	1 kohm,1/8W
R952	VRD-ST2CD102J	J	AA	1 kohm,1/6W
R953	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
R954	VRD-ST2CD152J	J	AA	1.5 kohms,1/6W
R955~957	VRD-MN2BD563J	J	AA	56 kohms,1/8W
R958,959	VRD-ST2EE4R7J	J	AA	4.7 ohms,1/4W
R967,968	VRD-ST2CD472J	J	AA	4.7 kohms,1/6W
R969	VRD-RT2HD4R7J	J	AA	4.7 ohms,1/2W
R970	VRD-RT2HD102J	J	AA	1 kohm,1/2W
R971	VRD-ST2CD683J	J	AA	68 kohms,1/6W
R972	VRD-ST2CD153J	J	AA	15 kohms,1/6W
R973	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R975,976	VRD-RT2HD8R2J	J	AA	8.2 ohms,1/2W
R977,978	VRD-ST2EE470J	J	AA	47 ohms,1/4W
R981,982	VRD-RT2HD681J	J	AA	680 ohms,1/2W
R983	VRD-ST2CD224J	J	AA	220 kohms,1/6W
R984	VRD-ST2CD473J	J	AA	47 kohms,1/6W
R986	VRD-RT2HD681J	J	AA	680 ohms,1/2W
R988	VRD-RT2HD681J	J	AA	680 ohms,1/2W
RD01	VRD-MN2BD681J	J	AA	680 ohms,1/8W
RD02	VRD-MN2BD821J	J	AA	820 ohms,1/8W
RD03	VRD-ST2CD102J	J	AA	1 kohm,1/6W
RD04	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD05	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
RD06	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
RD07	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
RD08	VRD-ST2CD562J	J	AA	5.6 kohms,1/6W
RD09	VRD-MN2BD103J	J	AA	10 kohm,1/8W
RD10	VRD-MN2BD183J	J	AA	18 kohms,1/8W
RD11	VRD-MN2BD333J	J	AA	33 kohms,1/8W
RD12	VRD-MN2BD104J	J	AA	100 kohm,1/8W
RD13	VRD-MN2BD681J	J	AA	680 ohms,1/8W
RD14	VRD-MN2BD821J	J	AA	820 ohms,1/8W
RD15	VRD-ST2CD182J	J	AA	1.8 kohms,1/6W
RD16	VRD-ST2CD392J	J	AA	3.9 kohms,1/6W
RD17	VRD-MN2BD184J	J	AA	180 kohms,1/8W
RD18	VRD-MN2BD681J	J	AA	680 ohms,1/8W
RD19	VRD-ST2CD821J	J	AA	820 ohms,1/6W
RD20	VRD-MN2BD102J	J	AA	1 kohm,1/8W
RD21	VRD-MN2BD152J	J	AA	1.5 kohms,1/8W
RD22	VRD-MN2BD222J	J	AA	2.2 kohms,1/8W
RD23	VRD-MN2BD272J	J	AA	2.7 kohms,1/8W
RD24	VRD-MN2BD392J	J	AA	3.9 kohms,1/8W
RD25	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W
RD26	VRD-ST2CD103J	J	AA	10 kohm,1/6W
RD27	VRD-MN2BD183J	J	AA	18 kohms,1/8W
RD28	VRD-ST2CD333J	J	AA	33 kohms,1/6W
RD29	VRD-MN2BD104J	J	AA	100 kohm,1/8W
RD30	VRD-MN2BD562J	J	AA	5.6 kohms,1/8W

OTHER CIRCUITRY PARTS

BI4/CNS4	QCNWN1572AWZZ	J	AF	Connector Ass'y,6/6Pin
BI601/CNS601	QCNWN1842AWZZ	J	AG	Connector Ass'y,6/6Pin
BI701/CNS8	QCNWN1843AWZZ	J	AH	Connector Ass'y,9/9Pin
BI902/CNS902	QCNWN1875AWZZ	J	AH	Connector Ass'y,10/10Pin
CNP1	QCNCM704GAWZZ	J	AC	Plug,7Pin
CNP2	QCNCM704HAWZZ	J	AC	Plug,8Pin
CNP3	92LCONE6P53253	J	AC	Plug,6Pin
CNP4	QCNCM705FAFZZ	J	AB	Plug,6Pin
CNP7	92LCONE6P53254	J	AC	Plug,6Pin
CNP8	92LCONE9P53254	J	AD	Plug,9Pin
CNP101	QCNCM705CAFZZ	J	AA	Plug,3Pin
CNP102	QCNCM705GAFZZ	J	AB	Plug,7Pin
CNP301	92LCONE3P5268	J	AC	Plug,3Pin
CNP701	QCNCWZX24AWZZ	J	AD	Socket,24Pin
CNP902	92LCONEAP5267	J	AC	Plug,10Pin
CNP971	92LCONE2P53253	J	AB	Plug,2Pin
CNP981	92LCONE5P52287	J	AC	Plug,5Pin
CNS1A/B	QCNWN1537AWZZ	J	AG	Connector Ass'y,7/7Pin
CNS2A/B	QCNWN1538AWZZ	J	AG	Connector Ass'y,8/8Pin
CNS3A/B	QCNWN1539AWZZ	J	AE	Connector Ass'y,6/6Pin
CNS701	QCNCWZF24AWZZ	J	AE	Socket,24Pin
CNS702	QCNCWZY08AWZZ	J	AC	Socket,8Pin
CNS971	QCNWN1389AWZZ	J	AC	Connector Ass'y,2Pin
⚠ F901,902	QFS-D402DAWNI	J	AC	Fuse,4A,125V
⚠ F903,904	QFS-D202DAWNI	J	AC	Fuse,2A,125V
FFC701	QCNWN1874AWZZ	J	AG	Flat Cable,24Pin
FFC702	QCNWN1838AWZZ	J	AD	Flat Cable,8Pin
FL701	VVKBJ11LM02T1	J	BC	FL Display
FW981	QCNWN1836AWZZ	J	AD	Flat Wire,5Pin

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
JK690	QSOCJ0219AWZZ	J	AD	Jack,Video/AUX In
JK701	QJAKM0010AWZZ	J	AF	Jack,Headphones
LG1	QLUGP0001AWZZ	J	AC	Lug
M1	92LMTR2790CASY	J	BB	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
M3	92LMEN7E6Y	J	AR	Motor with Worm Pulley [T/T Up Down Loading]
M901	RMOTV0027AWZZ	J	AM	Motor,Air Cooling Fan
RL914	RRLYD0014AWZZ	J	AK	Relay
RX701	VHLN63H380A-1	J	AK	Remote Sensor,N63H380A
SO901	QTANA0417AWZZ	J	AE	Terminal,Speaker
SW1	SWMPU10780MLB	J	AH	Switch,Push Type [Open/Close]
SW2	SWMPU11470MLB	J	AE	Switch,Push Type [Clamp]
SW3	SWMPU11470MLB	J	AE	Switch,Push Type [Disc Number]
SW4	QSWF9001AW01	J	AD	Switch,Push Type [Pickup In]
SW701	92LSWICHT1663T	J	AC	Switch,Key Type [Power]
SW702	92LSWICHT1663T	J	AC	Switch,Key Type [Clock]
SW703	92LSWICHT1663T	J	AC	Switch,Key Type [Timer]
SW712	92LSWICHT1663T	J	AC	Switch,Key Type [Disc Skip]
SW713	92LSWICHT1663T	J	AC	Switch,Key Type [Open/Close]
SW714	92LSWICHT1663T	J	AC	Switch,Key Type [Dimmer]
SW715	92LSWICHT1663T	J	AC	Switch,Key Type [X-Bass]
SW716	92LSWICHT1663T	J	AC	Switch,Key Type [Equalizer]
SW717	92LSWICHT1663T	J	AC	Switch,Key Type [Volume Up]
SW718	92LSWICHT1663T	J	AC	Switch,Key Type [Volume Down]
SW720	92LSWICHT1663T	J	AC	Switch,Key Type [CD]
SW721	92LSWICHT1663T	J	AC	Switch,Key Type [Tape]
SW722	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Down]
SW723	92LSWICHT1663T	J	AC	Switch,Key Type [Memory/Set]
SW724	92LSWICHT1663T	J	AC	Switch,Key Type [Rewind]
SW725	92LSWICHT1663T	J	AC	Switch,Key Type [Fast Forward]
SW726	92LSWICHT1663T	J	AC	Switch,Key Type [Play]
SW727	92LSWICHT1663T	J	AC	Switch,Key Type [Stop]
SW729	92LSWICHT1663T	J	AC	Switch,Key Type [Rec/Pause]
SW730	92LSWICHT1663T	J	AC	Switch,Key Type [Tuning Up]
SW731	92LSWICHT1663T	J	AC	Switch,Key Type [Video]
SW732	92LSWICHT1663T	J	AC	Switch,Key Type [Tuner]

CD MECHANISM PARTS

301	NGERH0011AWZZ	J	AC	Gear,Middle
302	NGERH0012AWZZ	J	AC	Gear,Drive
303	MLEVP0080AWZZ	J	AC	Rail,Guide
304	NSFTM0020AWFW	J	AD	Shaft,Guide
305	92LM-CUSN1524A	J	AC	Cushion
⚠ 306	92LHPC1LXASY	J	BD	Pickup Unit Ass'y
306- 1	————		—	Pickup Unit (Not Replacement Item)
306- 2	NGERR0043AFZZ	J	AC	Gear,Rack
306- 3	MSPRC0961AFZZ	J	AA	Spring,Rack
701	XBSSD26P06000	J	AA	Screw,ø2.6×6mm
702	XHBSD20P05000	J	AA	Screw,ø2×5mm
703	XBBSD20P03000	J	AA	Screw,ø2×3mm
704	LX-WZ1070AFZZ	J	AA	Washer,ø1.5×3.8×0.25mm
M1	92LMTR2790CASY	J	BB	Motor with Chassis [Spindle]
M2	92LMTR1854BASY	J	AP	Motor with Gear [Sled]
SW4	QSW-F9001AW01	J	AD	Switch,Leaf Type [Pickup In]

CABINET PARTS

201	92LCAB3561AASY	J		Front Panel Ass'y [For CD-BA250]
201	92LCAB3565AASY	J		Front Panel Ass'y [For CD-BA2600]
201- 1	————		—	Front Panel (Not Replacement Item)
201- 2	GDORF0099AWSA	J	AE	Holder,Cassette [Tape 1]
201- 3	GDORF0100AWSA	J	AE	Holder,Cassette [Tape 2]
201- 4	GCOVA1349AWSA	J	AG	Cover,Cassette [Tape 1 for CD-BA250]
201- 4	GCOVA1349AWSB	J	AH	Cover,Cassette [Tape 1 for CD-BA2600]
201- 5	GCOVA1350AWSA	J	AG	Cover,Cassette [Tape 2 for CD-BA250]
201- 5	GCOVA1350AWSB	J	AH	Cover,Cassette [Tape 2 for CD-BA2600]
201- 6	HDECQ0686AWSA	J	AE	Panel,Cassette [Tape 1]
201- 7	HDECQ0687AWSA	J	AE	Panel,Cassette [Tape 2]
201- 8	HDECQ0688AWSA	J	AK	Panel,Amp. [For CD-BA250]
201- 8	HDECQ0735AWSA	J		Panel,Amp. [For CD-BA2600]
201- 9	JKNBZ0777AWSA	J	AE	Button,Power [For CD-BA250]

CD-BA250/CD-BA2600

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
201- 9	JKNBZ0777AWSB	J	AE	Button,Power [For CD-BA2600]
201-10	JKNBZ0778AWSA	J	AF	Button,Dimmer/Tuning [For CD-BA250]
201-10	JKNBZ0778AWSB	J	AG	Button,Dimmer/Tuning [For CD-BA2600]
201-11	JKNBZ0779AWSA	J	AF	Button,Function
201-12	HDECQ0690AWSA	J	AC	Volume Ring
201-13	JKNBZ0780AWSA	J	AF	Button,Disc Control [For CD-BA250]
201-13	JKNBZ0780AWSB	J	AF	Button,Disc Control [For CD-BA2600]
201-14	JKNBZ0781AWSA	J	AG	Button,Center Operation
201-15	GCOVA1351AWSA	J	AB	Cover,Operation LED A
201-16	MLIFP0008AWZZ	J	AD	Damper
201-17	MSPRD0092AWFJ	J	AB	Spring,Cassette [Tape 1]
201-18	MSPRD0093AWFJ	J	AB	Spring,Cassette [Tape 2]
201-19	JKNBZ0783AWSA	J	AF	Button,X-Bass/Equalizer
201-20	PSHEP0063AWZZ	J		Filter,Remote Sensor
201-21	LHLDZ1328AWZZ	J	AC	Holder,Cassette Lock
201-22	MSPRC0029AWFJ	J	AB	Spring,Cassette Lock
201-23	MLOKC0006AWZZ	J	AB	Lock Lever Cassette [Tape 1]
201-24	MLOKC0007AWZZ	J	AB	Lock Lever Cassette [Tape 2]
201-25	JKNBZ0805AWSA	J	AE	Button,Volume
201-26	92LBADGE1671A	J	AC	Badge,SHARP
202	92LCAB3561BASY	J		Side Panel Ass'y,Left [For CD-BA250]
202	92LCAB3565BASY	J		Side Panel Ass'y Left [For CD-BA2600]
202- 1	————		—	Side Panel,Left (Not Replacement Item)
202- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
203	92LCAB3561CASY	J		Side Panel Ass'y,Right [For CD-BA250]
203	92LCAB3565CASY	J		Side Panel Ass'y Right [For CD-BA2600]
203- 1	————	J	—	Side Panel,Right (Not Replacement Item)
203- 2	PCUSG0022AWZZ	J	AB	Cushion,Leg
204	GCAB-1194AWSA	J	AP	Cabinet,Top [For CD-BA250]
204	GCAB-1194AWSB	J	AP	Cabinet,Top [For CD-BA2600]
206	GCOVA1348AWSA	J	AH	Cover,CD Tray
207	GITAR0662AWSA	J	AM	Rear Panel [CD-BA250 for Mexico]
207	GITAR0669AWSA	J		Rear Panel [CD-BA250 for U.S.A./Latin America*]
207	GITAR0697AWSA	J	AM	Rear Panel [CD-BA250 for Canada]
207	GITAR0710AWSA	J	AM	Rear Panel [CD-BA2600 for Mexico]
207	GITAR0711AWSA	J		Rear Panel [CD-BA2600 for Canada]
207	GITAR0712AWSA	J	AM	Rear Panel [CD-BA2600 for U.S.A./Latin America*]
211	LANGK0252AWFW	J	AE	Bracket,Fan Support
212	LBSHC0005AWZZ	J	AD	Bushing,AC Power Supply Cord
213	LCHSM0122AWFW	J	AN	Chassis,Main
214	LHLDZ1332AWZZ	J	AD	Holder,FL Display
218	NFANP0001AWZZ	J	AD	Rotary Fan
219	PCUSG0022AWZZ	J	AB	Cushion,Leg
220	PRDAR0188AWFW	J	AR	Heat Sink,Main
⚠ 222	QACCD0022AWZZ	J	AM	AC Power Supply Cord
223	QCNWN1844AWZZ	J	AC	Lug Wire
⚠ 224	QFSHD0001AWZZ	J	AB	Holder,Fuse
225	92LBE231616	J	AD	Belt
226	92LCSPR1431C	J	AA	Spring,Ring
227	92LEVA0330702	J	AD	Velvet Carpet,Chassis
228	92LMAG0104302	J	AE	Magnet
229	92LMT0304302	J	AB	Plate,Metal
230	92LNBAND1318A	J	AA	Nylon Band,80mm
231	92LNM0305401	J	AB	Velvet Carpet
232	92LPT0303002	J	AB	Roller
233	92LPT0304303	J	AB	Lever,Stop
234	92LPT0304304	J	AB	Stopper
235	92LPT0304305	J	AE	Lever,Lock
236	92LPT0304306	J	AG	Stabilizer
237	92LPT0304307	J	AC	Support,Cam
238	92LPT0304308	J	AB	Lock Gear Pin
239	92LPT0304309	J	AB	Cap,Pulley Stopper
240	92LPT0305413	J	AG	Cam Gear Lower
241	92LPT0309506	J	AD	Gear,Turntable Drive
242	92LPT0309507	J	AD	Gear,Open/Close Drive
243	92LPT0309508	J	AD	Gear,Planet
244	92LPT0309509	J	AD	Gear,Drive
245	92LPT0309510	J	AE	Gear,Pulley
246	92LPT0309511	J	AD	Gear,Middle
247	92LPT0311101	J	AB	Lever,Clamp
248	92LPT0311102	J	AC	Lever,Disc
249	92LPT0312005	J	AL	Gear,Cam
250	92LPT0320201	J	AE	Support,Stabilizer
251	92LPT0330301	J	AU	Chassis,Loading
252	92LPT0330803	J	AK	CD,Chassis
253	92LPT0331003	J	AT	Shassis,Slide
254	92LPT0331105	J	AM	Turntable
255	92LSP0304303	J	AB	Spring,Stopper
256	92LSP0304305	J	AB	Spring,Lock
257	92LSP0304306	J	AB	Spring,Lock Gear
258	KMECB0018AWZZ	J	BE	Tape Mechanism Ass'y
258- 1	92PF513-860	J		Head Plate Block [Tape 2]
258- 2	92PF525-338	J		Motor with Pulley [Tape]
258- 3	92PF567-649	J		Tape Mechanism PWB Ass'y
258- 4	92PFF19U-12	J		Belt,Main [Tape 2]
258- 5	92PF514-135	J	AL	Pinch Roller
258- 6	92PF19S-31	J		Belt,FF/REW [Tape 2]
258- 7	92PFF19N-11	J		Belt,Main [Tape 1]
258- 8	92PF522-061	J		Clutch Ass'y Block [Tape 1]
258- 9	92PFF19S-52	J		Belt,FF/REW [Tape 1]
258-10	92PF513-861	J		Head Plate Block [Tape 1]
258-11	92PF522-063	J		Clutch Ass'y Block [Tape 2]
259	PCOVQ3002AWZZ	J		Fan Cover
601	LX-BZ2222AXZZ	J	AB	Screw,Special
602	XJBSD30P12000	J	AA	Screw,ø3×12mm
603	LX-JZ0010AFFD	J	AA	Screw,ø3×10mm
605	XBBSD20P04000	J	AA	Screw,ø2×4mm
606	XEBSD30P10000	J	AA	Screw,ø3×10mm
607	XEBSD30P12000	J	AA	Screw,ø3×12mm
608	XESSD30P10000	J	AA	Screw,ø3×10mm
610	XJBSD30P10000	J	AA	Screw,ø3×10mm
611	XJBSD30P14000	J	AA	Screw,ø3×14mm
613	XJSSD30P10000	J	AA	Screw,ø3×10mm
614	92LSC0308MBZI	J	AB	Screw,ø3×8mm
615	92LSC0308RBZI	J	AB	Screw,ø3×8mm
616	XHBSD40P08000	J	AA	Screw,ø4×8mm

PACKING PARTS (Except for U.S.A.)

SPAKA0300AWZZ	J		Packing Add.
SPAKC1138AWZZ	J		Packing Case [CD-BA250 for U.S.A./Latin America*]
SPAKC1139AWZZ	J		Packing Case [CD-BA250 for Mexico]
SPAKC1140AWZZ	J	AX	Packing Case [CD-BA250 for Canada]
SPAKC1174AWZZ	J		Packing Case [CD-BA2600 for U.S.A./Latin America*]
SPAKC1175AWZZ	J		Packing Case [CD-BA2600 for Canada]
SPAKC1176AWZZ	J		Packing Case [CD-BA2600 for Mexico]
SPAKP0013AWZZ	J	AC	Polyethylene Bag,Unit
SPAKZ0771AWZZ	J		Center Pad
SPAKZ0773AWZZ	J		Top Pad
SSAKA0007AWZZ	J	AB	Polyethylene Bag,Accessories

ACCESSORIES

QANTL0007AWZZ	J	AK	AM/FM Loop Antenna
TINSE0343AWZZ	J	AE	Operation Manual [For U.S.A./Latin America*]
TINSK0111AWZZ	J	AK	Operation Manual [CD-BA250 for Canada]
TINSK0111AWZZ	J	AK	Operation Manual [CD-BA2600 for Canada]
TINSZ0649AWZZ	J	AC	Quick Guide [For U.S.A./Latin America* Only]
TINSZ0651AWZZ	J	AF	Operation Manual [CD-BA250 for Mexico]
TINSZ0651AWZZ	J	AK	Operation Manual [CD-BA2600 for Mexico]
TLABN0112AWZZ	J	AA	Label,Serial Number

NO.	PARTS CODE	★	PRICE RANK	DESCRIPTION
	TLABR1180AWZZ	J	AB	Label,Bar Code [For CD-BA250]
	TLABR1181AWZZ	J	AB	Label,Bar Code [For CD-BA2600]
	TLABZ0872AWZZ	J	AC	Label,Feature [Tape 1]
	TLABZ0873AWZZ	J	AC	Label,Feature [Tape 2]
	RRMCG0264AWSA	J	AQ	Remote Control
	GFTAB1022AWSB	J	AK	Battery Lid,Remote Control

P.W.B. ASSEMBLY (Not Replacement Item)

PWB-A1~3	92LPWB3561MANS	J	—	Main/Power/Transformer (Combined Ass'y)
PWB-B1,2	92LPWB3561DPLS	J	—	Display/Headphones (Combined Ass'y)
PWB-C	92LPWB3552CDUS	J	—	CD Servo
PWB-D	92PF567-649	J	—	Tape Mechanism
PWB-E	92LPC99C017	J	AE	CD Loading Motor (PWB Only)
PWB-F	QPWBF0027AWZZ	J	AD	CD Motor (PWB Only)

OTHER SERVICE PART

	UDSKA0004AFZZ	J	AZ	CD Pickup Lens Cleaner

Latin America*: Chile/Colombia/Dominica Pepublic/Guatemala/Barbados/ Trinidad and Tobago/Argentina/Panama/Balboa/Venezuela

CP-BA250

SPEAKER BOX PARTS

901	GBOXS6002AWSA	J	AX	Speaker Box Ass'y
902	CWAKP1045AWSA	J	AN	Net Frame Ass'y
903	HPNLS1020AWSA	J	AW	Front Panel
904	LHLDZ8001AWSA	J	AD	Catching Holder
906	PCUSG0022AWZZ	J	AB	Foot Cushion
907	TSPC-0820AWZZ	J		Label,Specifications
908	XJBSD40P12000	J	AA	Screw,ø4×12mm
909	XJBSD30P10000	J	AA	Screw,ø3×10mm
SP1,2	RSPA10007AW6W	J	AX	Woofer
SP3,4	RSPA00008AW6T	J	AP	Tweeter

PACKING PARTS

	SPAKA0301AWZZ	J		Packing Add.
	SSAKH0051AWZZ	J	AC	Polyethylene Bag,Speaker

CP-BA2600

SPEAKER BOX PARTS

901	GBOXS6003AWSA	J	AX	Speaker Box Ass'y
902	CWAKP1045AWSB	J	AN	Net Frame Ass'y
903	HPNLS1020AWSB	J	AW	Front Panel
904	LHLDZ8001AWSA	J	AD	Catching Holder
906	PCUSG0022AWZZ	J	AB	Foot Cushion
907	TSPC-0855AWZZ	J		Label,Specifications
908	XJBSD40P12000	J	AA	Screw,ø4×12mm
909	XJBSD30P10000	J	AA	Screw,ø3×10mm
SP1,2	RSPA10007AW6W	J	AX	Woofer
SP3,4	RSPA00008AW6T	J	AP	Tweeter

PACKING PARTS

	SPAKA0301AWZZ	J		Packing Add.
	SSAKH0051AWZZ	J	AC	Polyethylene Bag

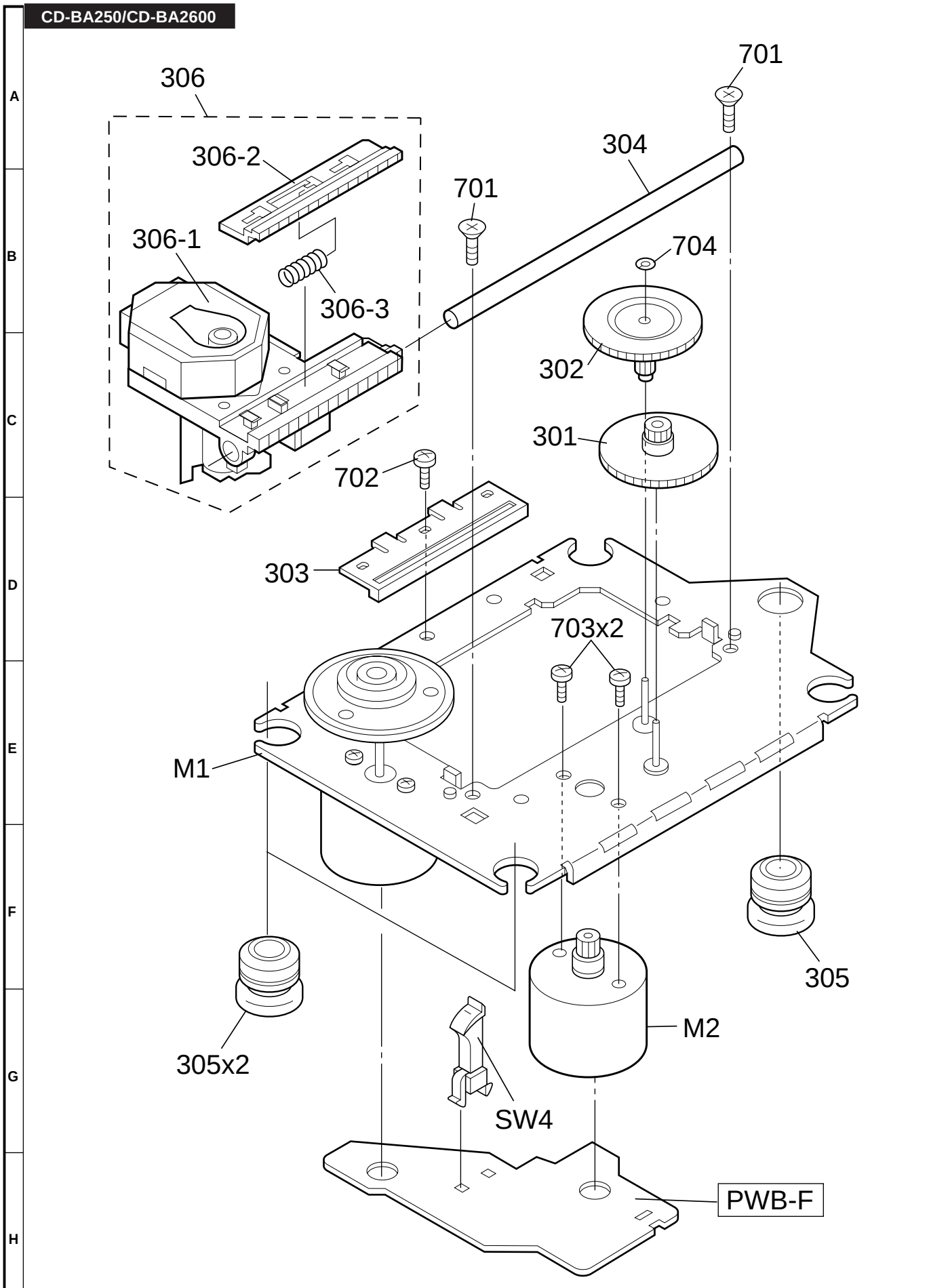


Figure 7 CD MECHANISM EXPLODED VIEW

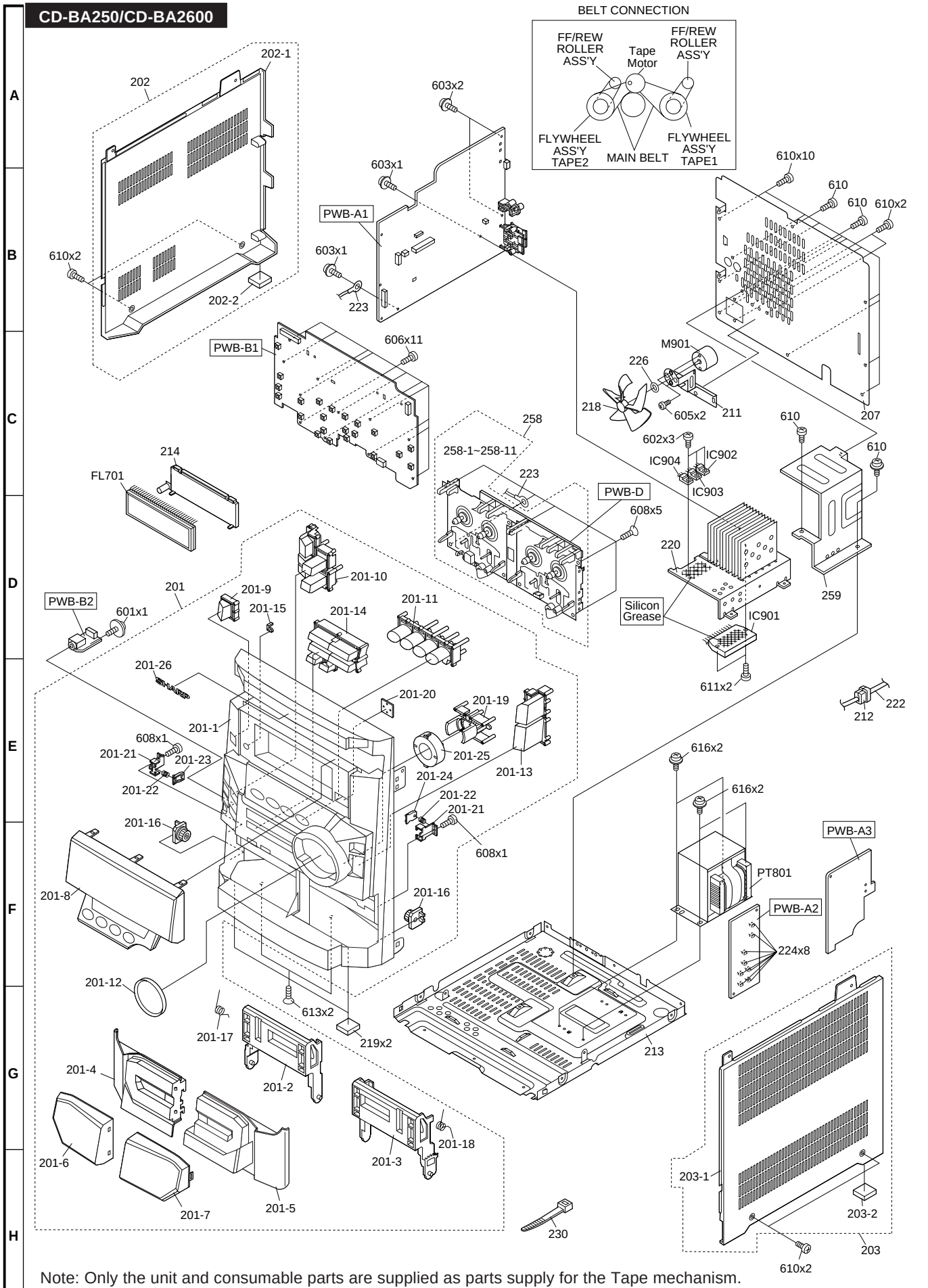


Figure 8 CABINET EXPLODED VIEW (1/2)

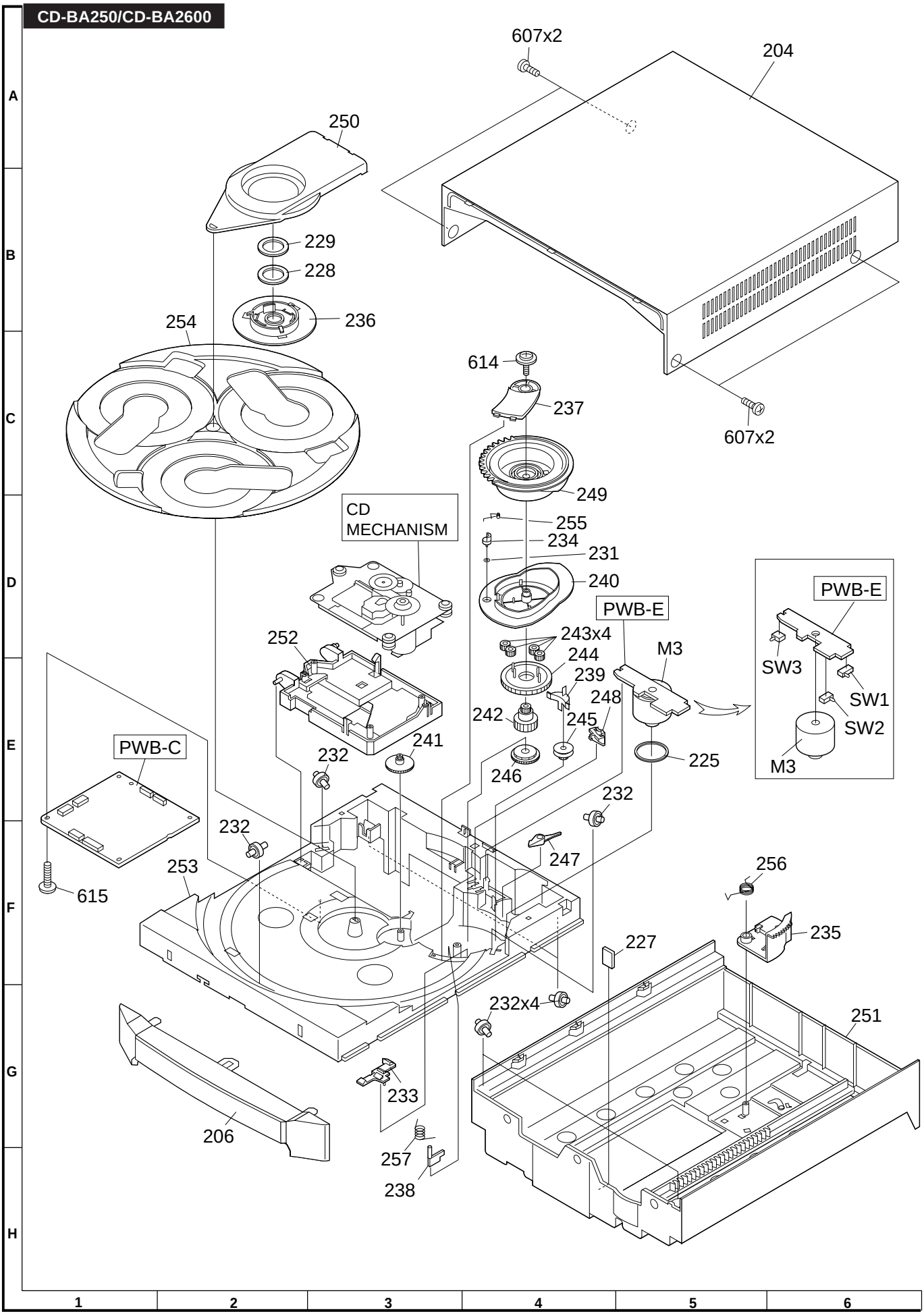


Figure 9 CABINET EXPLODED VIEW (2/2)

CP-BA250/CP-BA2600

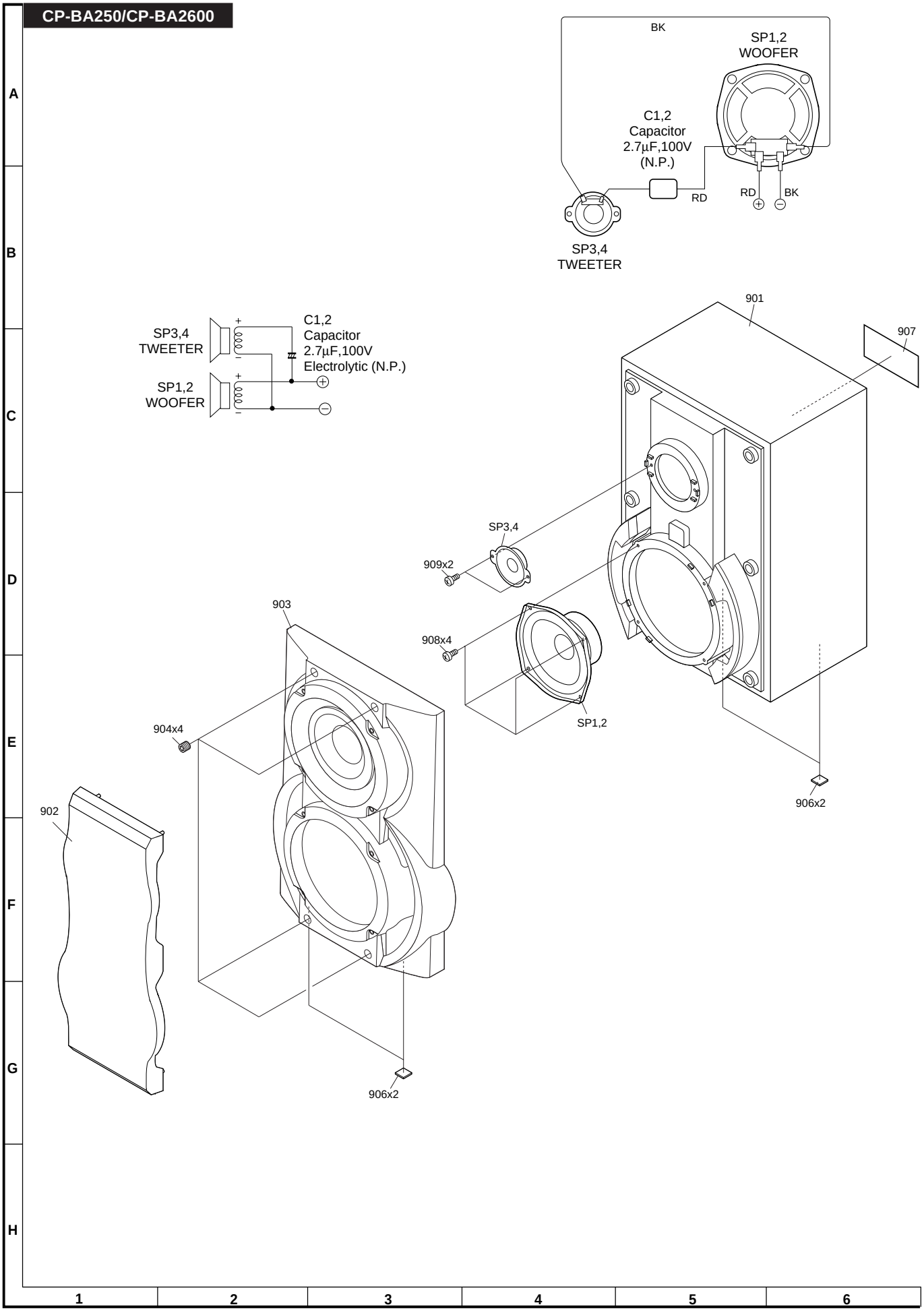
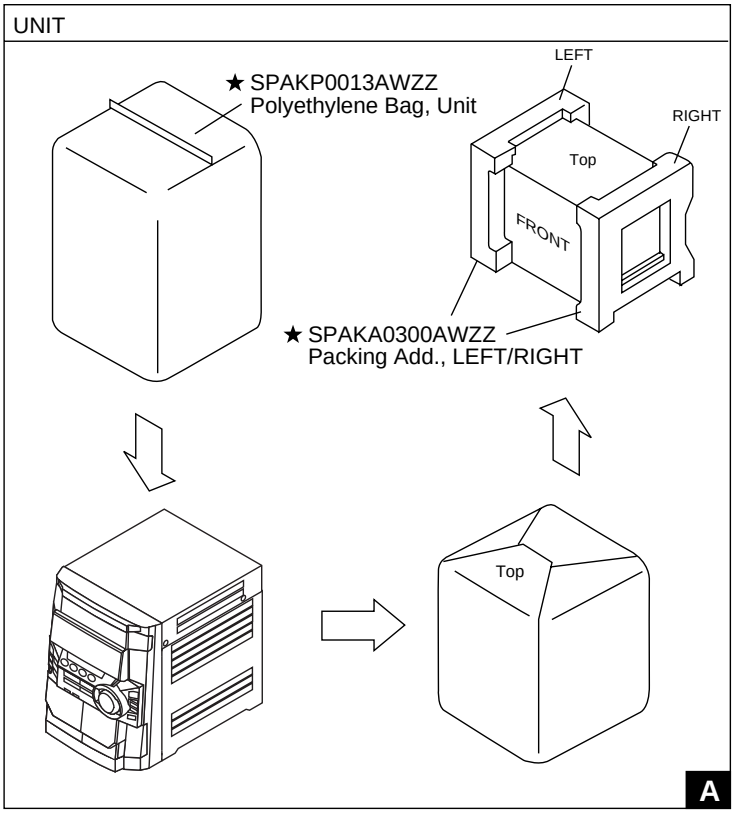
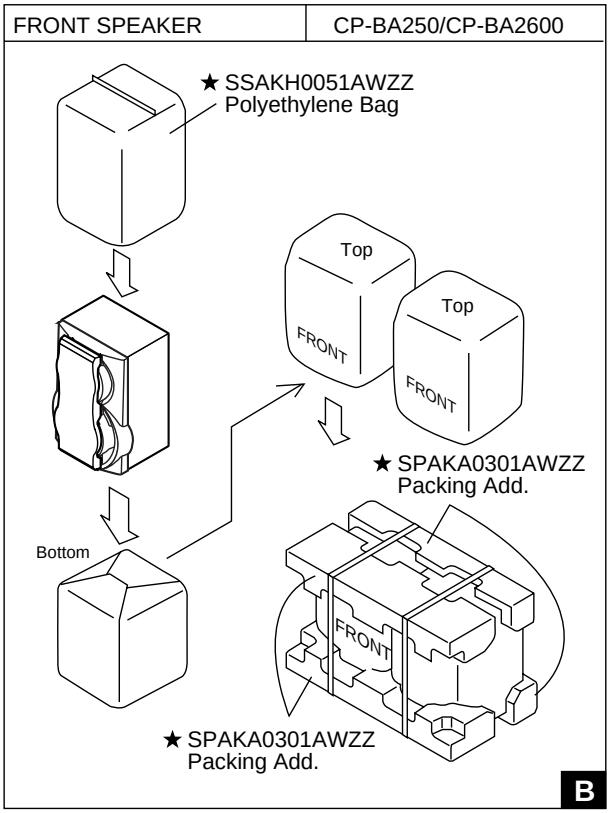


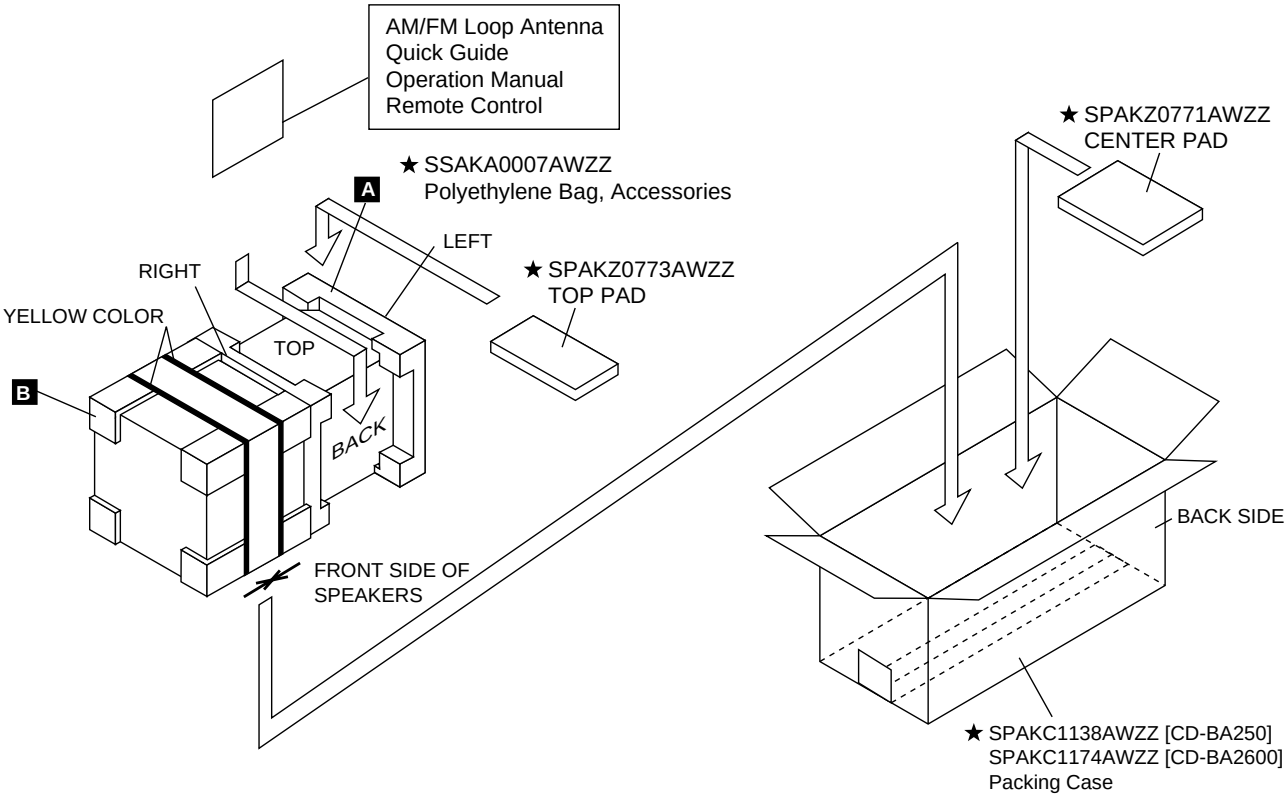
Figure 10 SPEAKER EXPLODED VIEW

PACKING OF THE SET (FOR U.S.A. ONLY)

Setting position of switches and knobs	
Tape Mechanism	STOP







★Not Replacement Item

— MEMO —

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SHARP CORPORATION
Communication Systems Group
Quality & Reliability Control Center
Higashihiroshima, Hiroshima 739-0192, Japan

Printed in Japan

A0102-2462DS•HA•M

SC • SL • LAG